

Questions 1-10 are based on the following passage.

This passage is adapted from James Joyce, "A Little Cloud." Originally published in 1914.

APRIL 2022 US

Line Eight years before he had seen his friend off at the North Wall and wished him godspeed. Gallaher had got on. You could tell that at once by his travelled air, his well-cut tweed suit, and fearless accent. Few fellows had talents like his and fewer still could remain unspoiled by such success.

5 Gallaher's heart was in the right place and he had deserved to win. It was something to have a friend like that.

Little Chandler's thoughts ever since lunch-time had been of his meeting with Gallaher, of Gallaher's invitation and of the great city of London where Gallaher lived. He was called Little Chandler because, though he was but slightly under the average stature, he gave one the idea of being a little man. His hands were white and small, his frame was fragile, his voice was quiet and his manners were refined. He took the greatest care of his fair silken hair and moustache and used perfume discreetly on his handkerchief. The half-moons of his nails were perfect and when he smiled

10 you caught a glimpse of a row of childish white teeth.

As he sat at his desk in the King's Inns he thought what changes those eight years had brought. The friend whom he had known under a shabby and necessitous guise had become a brilliant figure on the London Press. He turned often from his tiresome writing to gaze out of the office window. The glow of a late autumn sunset covered the grass plots and walks. It cast a shower of kindly golden dust on the untidy nurses and decrepit old men who drowsed on the benches; it flickered upon all the moving figures—on the children who ran screaming along the gravel paths and on everyone who passed through the gardens. He watched the scene

15 and thought of life; and (as always happened when he thought of life) he became sad. A gentle melancholy took possession of him. He felt how useless it was to struggle against fortune, this being the burden of wisdom which the ages had bequeathed to him.

He remembered the books of poetry upon his shelves at home. He had bought them in his bachelor days and many an evening, as he sat in the little room off the hall, he had been tempted to take one down from the bookshelf and read out something to his wife. But shyness had always held him back; and so the books had remained on their shelves. At times he repeated lines to himself and this consoled him.

35 When his hour had struck he stood up and took leave of his desk and of his fellow-clerks punctiliously. He emerged from under the feudal arch of the King's Inns, a neat modest figure, and walked swiftly down Henrietta

Street. The golden sunset was waning and the air had grown sharp. A horde of grimy children populated the street. They stood or ran in the roadway or crawled up the steps before the gaping doors or squatted like mice upon the thresholds. Little Chandler gave them no thought. He picked his way deftly through all that minute life and under the shadow of the gaunt spectral mansions in which the old nobility of Dublin had roystered. No memory of the past touched him, for his mind was full of a present joy.

40 He had never been in Corless's but he knew the value of the name. He knew that people went there after the theatre to eat oysters; and he had heard that the waiters there spoke French and German. Walking swiftly by at night he had seen cabs drawn up before the door and richly dressed ladies, escorted by cavaliers, alight and enter quickly. They wore noisy dresses and many wraps. Their faces were powdered and they caught up their dresses, when they touched earth. He had always passed without turning his head to look. It was his habit to walk swiftly in the street even by day and whenever he found himself in the city late at night he hurried on his way apprehensively and excitedly. Sometimes, however, he courted the causes of his fear. He chose the darkest and narrowest streets and, as he walked boldly forward, the silence that was spread about his footsteps troubled him, the wandering, silent figures troubled him; and at times a sound of low fugitive laughter made him tremble like a leaf.

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He turned to the right towards Capel Street. Ignatius Gallaher on the London Press! Who would have thought it possible eight years before? Still, now that he reviewed the past, Little Chandler could remember many signs of future greatness in his friend.

1

Which choice best summarizes the passage?

[View Answer](#) ^

- A. A character reunites with an old friend and discovers that they cannot resume their friendship.
- B. An invitation from an old friend prompts a character to reflect on both the past and the present.
- C. A chance meeting with an old friend inspires a character to start a new life in another country.
- D. A character's recent professional success prompts him to provide assistance to an old friend.

Question Difficulty: Easy

2

Which choice best describes the state of mind that Gallaher's return inspires in Little Chandler?

[View Answer](#) ^

- A. He is impressed by Gallaher's success even though thinking about it calls to mind his own unhappiness.
- B. He is anxious to downplay Gallaher's achievements in an attempt to make his own look better.
- C. He envies Gallaher's remarkable success and is angry about how Gallaher achieved it.
- D. He admires Gallaher's rise to fame but is thankful that he himself lives a relatively inconspicuous life.

Question Difficulty: Medium

3

Which choice best supports the idea that Little Chandler seeks to rationalize his own passivity?

[View Answer](#) ^

- A. *[error]* ("Gallaher's . . . that")
- B. [lines 24-30](#) ("As . . . window")
- C. [lines 40-42](#) ("He felt . . . to him")
- D. [lines 44-48](#) ("He had . . . wife")

Question Difficulty: Medium

4

It can reasonably be inferred from the passage that one of Little Chandler's prominent characteristics is that he is

[View Answer](#) ^

- A. excessively boastful of his personal achievements.
- B. often unpredictable in his dealings with other people.
- C. highly critical of other people's aspirations.
- D. somewhat vain about his personal appearance.

Question Difficulty: Easy

5

The observations in [lines 30-40](#) ("The glow . . . of him") mainly serve to

[View Answer](#) ^

- A. dramatize how the sunset alters the interactions among those in the gardens who witness it.
- B. suggest that the natural beauty of the sunset affects all the people in the gardens equally.
- C. convey the subtle influence that the sunset exerts on Little Chandler's mood.
- D. suggest that the people in the gardens share Little Chandler's attitude toward the sunset.

Question Difficulty: Medium

6

As used in [line 55](#), "figure" most nearly refers to the

[View Answer](#) ^

- A. depiction of a person in artwork.
- B. social position occupied by a person.
- C. image presented by a person's body.
- D. historical importance of a person.

Question Difficulty: Medium

7 By saying in [lines 65-66](#) that “no memory of the past touched” Little Chandler, the narrator most likely means that Little Chandler

[View Answer](#) ^

- A. doesn't fix his attention on the age and decay of his surroundings during his walk.
- B. can analyze his memories while remaining comparatively unaffected by them.
- C. tends to retain few memories of his personal experiences.
- D. is unable to recall key memories of Gallaher.

Question Difficulty: Hard

8 Based on the passage, which choice best identifies a contradictory impulse in Little Chandler's character?

[View Answer](#) ^

- A. He fixates on a social world that he ultimately believes to be a hollow spectacle.
- B. He immerses himself in sights and sounds that strike him as ultimately frivolous.
- C. He scorns a historical era that he concedes is preferable in some ways to the present.
- D. He derives excitement from placing himself in settings he finds menacing.

Question Difficulty: Medium

9 Which choice provides the best evidence for the answer to the previous question?

[View Answer](#) ^

- A. [lines 62-66](#) (“He picked . . . joy”)
- B. [lines 71-76](#) (“Walking . . . earth”)
- C. [lines 76-81](#) (“He had . . . excitedly”)
- D. [lines 81-87](#) (“Sometimes . . . leaf”)

Question Difficulty: Hard

10 The main effect of the last paragraph is to

[View Answer](#) ^

- A. convey Little Chandler's sense that hindsight has lent a degree of inevitability to Gallaher's success.
- B. suggest the extent to which the news of Gallaher's success has altered Little Chandler's memory of him.
- C. demonstrate that Little Chandler's confidence in Gallaher has been vindicated by Gallaher's success.
- D. characterize Little Chandler as regretful that he had failed to foresee Gallaher's success.

Question Difficulty: Hard

Questions 11-20 are based on the following passage and supplementary material.

This passage is adapted from Neeru Paharia, Anat Keinan, and Jill Avery, "The Upside to Large Competitors." ©2014 by Massachusetts Institute of Technology.

Line Large competitors are often viewed as a major threat for startups and
small companies; big companies have more financial resources and greater
scale, market power and brand awareness than smaller ones. However, our
research finds that a smaller brand can actually benefit if consumers can
5 see the competitive threat it faces from a larger organization.

When a U.S.-based ice cream chain with about 1,400 stores moved
within 50 steps of a J.P. Licks ice cream store in Newton, Massachusetts,
some people expected that J.P. Licks, a small, locally owned company,
would be beaten out of the Newton market. But consumers rallied around
10 J.P. Licks, and the national chain later closed its nearby location. When the
owner of the Los Angeles-based coffee store chain The Coffee Bean & Tea
Leaf could not stop a large coffee shop chain from moving in next door, he
was surprised to see his sales shoot up—so much so that he started
proactively colocating new stores next to large chain ones.

15 These examples are not anomalies. In six lab and field studies, we
explored the effects of having a large, dominant competitor and found that
highlighting a large competitor's size and close proximity can help smaller
brands, instead of harming them. Compared to when they are in
competition with brands that are similar to them in size or when consumers
20 view them outside of a competitive context, small brands see consumer
support go up when they are faced with a competitive threat from large
brands. This support translates into higher purchase intention, more
purchases and more favorable online reviews.

As part of our research, we conducted a field study at an independent
25 bookstore in Cambridge, Massachusetts. Upon entering the bookstore, 163
prospective shoppers were exposed to one of three versions of an in-store
ad, emphasizing either the store's large competitors, small competitors or
no competition. Shoppers who read the "large competitors" version were
told that the store's main competitors are large corporations that have the
ability to put small businesses such as this bookstore out of business. The
30 "small competitors" version indicated the store's main competitors are other
locally owned small bookstores in Cambridge. In the "no competition"
version, participants were given no information about the competitive
environment. Shoppers were then given a \$5 coupon, coded with the in-
store ad version they read. Analyzing shoppers' sales receipts and the
35 number of redeemed coupons, we found that shoppers were significantly

number of redeemed coupons, we found that shoppers were significantly
more likely to make a purchase after reading the "large competitors"
version of the in-store ad, compared to the "small competitors" version or
the "no competition" version. They also purchased more items and spent
40 more money at the store, compared to shoppers reading the "small
competitors" or "no competition" versions. These results suggest that
framing the competitive game and emphasizing a competitive narrative
against a larger company can help a small establishment—and spur
consumers to make a purchase that supports the smaller competitor.

45 In subsequent studies, we tested this "framing-the-game" effect in
various contexts and product categories and further found that support for a
large brand decreases when consumers view it as being in competition with
a smaller brand. In one study, we asked participants to assess two
hypothetical rival tire shops, "Tire World" and "Tire Planet," under three
conditions—small vs. large, small vs. small or large vs. large
competitors. While participants indicated no preference for the small or
large shop when it was competing against a competitor of similar size, the
small vs. large competitive context elicited a strong preference for the small
rather than large shop.

Figure 1

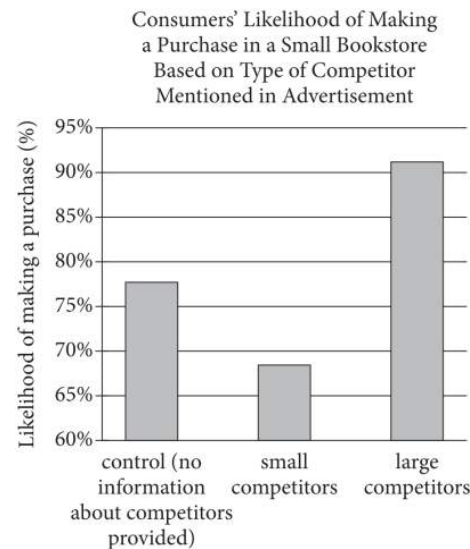
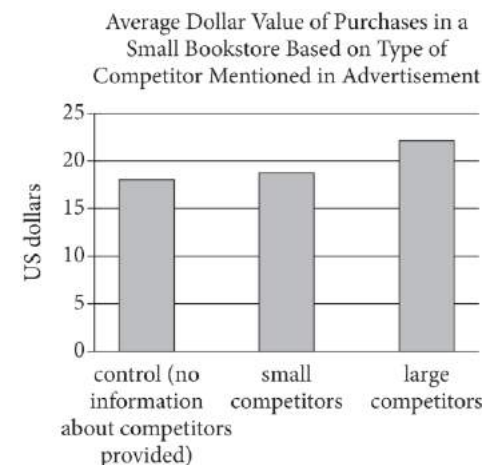


Figure 2



11

Which choice best describes the overall structure of the passage?

[View Answer](#) ^

- A. A popular belief about a particular industry is explained, experiments supporting that belief are described, and the implications of the experiments are identified.
- B. An unexpected claim about consumer behavior is introduced, examples supporting the claim are detailed, and experiments confirming the claim are discussed.
- C. A debate about an economic theory is outlined, two opposing views on the debate are explained in more detail, and research supporting one of those views is recounted.
- D. A negative impact of a common business practice is presented, two stories are used as an illustration, and research suggesting improvements is summarized.

Question Difficulty: Easy

12

As used in [line 10](#), “expected” most nearly means

[View Answer](#) ^

- A. anticipated.
- B. demanded.
- C. hoped.
- D. admitted.

Question Difficulty: Easy

13

The third paragraph ([lines 20-31](#)) primarily serves to

[View Answer](#) ^

- A. outline the steps in a large field study.
- B. offer another researcher's interpretation of the team's data.
- C. introduce a challenge the researchers faced.
- D. summarize the findings of a series of experiments.

Question Difficulty: Easy

14

Which choice provides the best evidence for the idea that consumers' promotion of a small company may extend beyond shopping at its stores?

[View Answer](#) ^

- A. [lines 29-31](#) ("This . . . reviews")
- B. [lines 33-37](#) ("Upon . . . competition")
- C. [lines 37-41](#) ("Shoppers business")
- D. [lines 41-45](#) ("The small . . . environment")

Question Difficulty: Easy

15

As used in [line 45](#), “environment” most nearly means

[View Answer](#) ^

- A. circumstances.
- B. locale.
- C. scenery.
- D. resources.

Question Difficulty: Easy

16

The studies in the passage suggest that if customers of a large chain bookstore were given information focusing on the store's small competitors, a likely result is that the large store would

[View Answer](#) ^

- A. receive more positive reviews from its customers.
- B. gain customers who perceive it as offering more choices than smaller shops.
- C. benefit from people's perception that its competition is now even greater.
- D. lose customers who would now see it as a competitor of the smaller shops.

Question Difficulty: Easy

17

Which choice provides the best evidence for the answer to the previous question?

[View Answer](#) ^

- A. [lines 12-14](#) (“But consumers . . . location”)
- B. [lines 46-52](#) (“Analyzing competition version”)
- C. [lines 60-64](#) (“In subsequent . . . brand”)
- D. [lines 64-68](#) (“In one . . . competitors”)

Question Difficulty: Medium

18

Which approach for increasing the likelihood of consumers making a purchase in a small store is best supported by figure 1?

[View Answer](#) ^

- A. If the small store is currently advertising its small competitors, it should provide no information about its competitors instead.
- B. If the small store is currently providing no information about its competitors, it should provide information about its small competitors instead.
- C. If the small store is currently providing information about its large competitors, it should provide information about its small competitors instead.
- D. If the small store is currently providing information about its large competitors, it should provide no information about its competitors instead.

Question Difficulty: Medium

19

According to figure 2, the average dollar value of purchases in a small bookstore that mentioned small competitors in its advertisement was between

[View Answer](#) ^

- A. 5 and 10 dollars.
- B. 10 and 15 dollars.
- C. 15 and 20 dollars.
- D. 20 and 25 dollars.

Question Difficulty: Easy

Which statement is best supported by information in figures 1 and 2?

[View Answer](#) ^

- A. While customers were more likely to make a purchase at a small store whose advertisement highlighted a large competitor, they tended to spend less than they would have if the advertisement had provided no information about competitors.
- B. Advertising mentioning competitors of any size tended to result in a small store's customers making more purchases than if the store's advertising had provided no information about competitors, but the dollar value of those purchases was lower on average.
- C. Advertising mentioning a large competitor tended to result in more customers making purchases in a small store and in a higher average dollar value for purchases than if the store's advertising had provided no information about competitors.
- D. While customers were less likely to make a purchase at a small store whose advertisement highlighted a small competitor than if it had highlighted large competitors, the decrease in the number of purchases was offset by the increase in the average dollar amount of purchases.

Question Difficulty: Easy

Questions 21-30 are based on the following passages.

Passage 1 is adapted from Danny Lewis, “After Decades of Decline, Tiger Populations Could Be on the Rise.” ©2016 by Smithsonian Institution. Passage 2 is adapted from K. Ullas Karanth, “The Trouble with Tiger Numbers.” ©2016 by Scientific American, a division of Springer Nature America, Inc.

Passage 1

After years of hard work by conservationists throughout Asia, a new study brings good news for the world’s wild tigers. According to a new report by the World Wildlife Fund (WWF), the number of tigers living in the wild may have been slowly rising over the last several years. If continued surveys prove this to be true, this would mark the first time in more than a century that tiger populations have grown.

In a study compiling surveys taken across Asia, researchers at the WWF found that there are at least 3,890 tigers living in the wild today—a considerable increase from the 3,200 recorded in 2010. The study suggests that the commitment to and success of conservation programs in some countries have contributed to the overall growth of the global tiger population.

“It’s a positive trend,” Ginette Hemley, the WWF’s senior vice president of wildlife conservation, says. “We’re cautiously hopeful.”

Counting wild tigers, however, isn’t easy. While tens of thousands of tigers once roamed Asia from Turkey to Indonesia, their habitats have become tiny and scattered during the last century. Wild tigers are notoriously elusive, preferring to hide out in hard-to-reach places in jungle undergrowth and high mountains.

Combined with their low numbers, these factors can make them difficult to keep track of, which can leave some uncertainty as to whether the populations are truly on the rise. The increased numbers may in part reflect better surveying methods.

Additionally, while the global number of wild tigers appears to have gone up, a country-by-country analysis is more sobering. Though several countries including India, Nepal, Bhutan and Russia may have gone up in recent years, others have seen tigers disappear thanks to poaching and habitat loss.

Passage 2

Photographic capture-recapture and large-scale occupancy modeling are now used to estimate tiger numbers and range in several countries across Asia. (Scientists who study other elusive carnivores with unique body markings, including African wild dogs and wolverines, are also employing these approaches.) Yet on the whole, although the science of tiger population assessment has rapidly progressed, its adoption by governmental and nongovernmental conservation agencies has not, whether because of a lack of understanding of or comfort with the new methods or because the old methods cast a more flattering light on their efforts.

A recent example illustrates just how insidious reliance on outdated tools is. In April the WWF and the Global Tiger Forum announced to great fanfare that the planet's wild tiger population was at last on the rise, numbering 3,890 individuals. These groups aim to increase the number of tigers to 6,000 by 2022. But their tally, based on official estimates, relied on flawed methodologies, including the use of statistically weak extrapolations from tiger photographs and field counts of spoor.¹ And their goal for population growth far exceeds what one would expect to realize on the basis of studies carried out using more rigorous techniques. Furthermore, apart from the increases in tigers in a few reserves in India and parts of Thailand, there are no convincing data to show that populations are recovering in the rest of Southeast Asia or Russia. Indeed, countries such as Cambodia, Vietnam and China have lost their viable tiger populations in recent years—losses masked by any single global tiger number.

Speculative tiger numbers for countries and regions undermine efforts to save tigers by distracting conservationists and the public from what should be our top priority: guarding and growing the source populations.² In a way, the overall number of wild tigers, if we could even get an accurate count, may not matter. The source populations are the ones we need to monitor vigilantly, using the best science available to track their numbers. Only with reliable counts can we set realistic goals for future growth, develop suitable strategies for meeting those goals and measure the impact of our conservation efforts.

History shows that scientific progress can stall from lack of understanding, institutional inertia and political considerations for decades or even centuries. But as the world enters into the sixth mass extinction of wild species, we simply cannot afford to divorce conservation practices from sound science if we are to have any hope of saving a wildlife icon like the majestic tiger.

21

As used in [line 16](#), “positive” most nearly means

[View Answer](#) ^

- A. emphatic.
- B. specific.
- C. reliable.
- D. favorable.

Question Difficulty: Easy

22

According to Passage 1, counting wild tigers is difficult because tigers

[View Answer](#) ^

- A. move extremely quickly from one location to another.
- B. reside in environments that are relatively inaccessible to humans.
- C. bear a superficial resemblance to other related species.
- D. exhibit behavior that is potentially threatening to humans.

Question Difficulty: Easy

23

Based on Passage 1, what is one factor that may have contributed to the rise in the reported global tiger population?

[View Answer](#) ^

- A. Photographic technology has improved in its ability to detect animals in remote environments.
- B. Recent measurement techniques used to count animals are more accurate than those used in the past.
- C. Scientists' understanding of the typical growth rate for populations of endangered species has improved.
- D. Wildlife conservation strategies are more uniform from country to country than they once were.

Question Difficulty: Medium

24

Which choice from Passage 1 provides the best evidence for the answer to the previous question?

[View Answer](#) ^

- A. [lines 10-13](#) (“In a . . . 2010”)
- B. [lines 18-20](#) (“It’s . . . hopeful”)
- C. [lines 30-31](#) (“The increased . . . methods”)
- D. [lines 34-37](#) (“Though . . . loss”)

Question Difficulty: Medium

25

According to Passage 2, the wild tiger population estimate offered by the WWF and the Global Tiger Forum may be flawed as a result of which factor?

[View Answer](#) ^

- A. Generalization from a selection of evidence that is likely incomplete
- B. Limitation to data that are more relevant in certain countries than in others
- C. Reliance on a new experimental tool that has not been thoroughly tested in the field
- D. Assumption of stability in population growth over time that is not supported by data

Question Difficulty: Hard

26

As used in [line 62](#), “realize” most nearly means

[View Answer](#) ^

- A. comprehend.
- B. obtain.
- C. perfect.
- D. create.

Question Difficulty: Medium

27

Which choice best states the relationship between the two passages?

[View Answer](#) ^

- A. Passage 2 compares and critiques the conservation solutions recommended in Passage 1.
- B. Passage 2 questions the professional credibility of the scientists profiled in Passage 1.
- C. Passage 2 suggests several applications of the conclusions reached in Passage 1.
- D. Passage 2 challenges the reliability of research results discussed in Passage 1.

Question Difficulty: Medium

28

It can reasonably be inferred from the passages that their authors would both agree that wild tiger population sizes are

[View Answer](#) ^

- A. recovering more fully in certain countries than in others.
- B. beginning to return to the levels recorded in 2010.
- C. responding predictably to aggressive conservation attempts.
- D. declining steadily despite continual human intervention.

Question Difficulty: Easy

29

The author of Passage 2 would most likely respond to the conclusions in the first paragraph of Passage 1 by asserting that such claims

[View Answer](#) ^

- A. only apply to certain subspecies of tigers and are therefore inconclusive.
- B. will offer incentive for countries and regions to invest further in wildlife preservation programs.
- C. prove that rigorous efforts to protect endangered species result in quick recovery of populations.
- D. may lead people to believe that tigers are recovering when in fact they continue to require vigilant protection.

Question Difficulty: Medium

30

Which choice from Passage 2 provides the best evidence for the answer to the previous question?

[View Answer](#) ^

- A. [lines 53-56](#) (“In April . . . individuals”)
- B. [lines 60-63](#) (“And their . . . techniques”)
- C. [lines 71-75](#) (“Speculative . . . populations”)
- D. [lines 79-82](#) (“Only . . . efforts”)

Question Difficulty: Medium

Questions 31-41 are based on the following passage.

This passage is adapted from a speech delivered in 1905 by Lucy Eldine Gonzalez Parsons, "The Principles of Anarchism." Parsons was a political activist.

I think I cannot open my address more appropriately than by stating my experience in my long connection with the reform movement.

It was during the great railroad strike of 1877 that I first became interested in what is known as the "Labor Question."¹ I then thought as many thousands of earnest, sincere people think, that the aggregate power operating in human society, known as government, could be made an instrument in the hands of the oppressed to alleviate their sufferings. But a closer study of the origin, history and tendency of governments convinced me that this was a mistake.

I came to understand how organized governments used their concentrated power to retard progress by their ever-ready means of silencing the voice of discontent if raised in vigorous protest against the machinations of the scheming few, who always did, always will and always must rule in the councils of nations where majority rule is recognized as the only means of adjusting the affairs of the people.

I came to understand that such concentrated power can be always wielded in the interest of the few and at the expense of the many. Government in its last analysis is this power reduced to a science. Governments never lead; they follow progress. When the prison, stake or scaffold can no longer silence the voice of the protesting minority, progress moves on a step, but not until then.

I will state this contention in another way: I learned by close study that it made no difference what fair promises a political party, out of power, might make to the people in order to secure their confidence, when once securely established in control of the affairs of society; that they were after all but human with all the human attributes of the politician. Among these are: First, to remain in power at all hazards; if not individually, then those holding essentially the same views as the administration must be kept in control. Second, in order to keep in power, it is necessary to build up a powerful machine; one strong enough to crush all opposition and silence all vigorous murmurs of discontent, or the party machine might be smashed and the party thereby lose control.

When I came to realize the faults, failings, shortcomings, aspirations and ambitions of fallible man, I concluded that it would not be the safest nor best policy for society, as a whole, to entrust the management of all its affairs, with all their manifold deviations and ramifications in the hands of finite man, to be managed by the party which happened

to come into power, and therefore was the majority party, nor did it then, nor does it now make one particle of difference to me what a party out of power may promise; it does not tend to allay my fears of [what] a party, when entrenched and securely seated in power might do to crush opposition, and silence the voice of the minority, and thus retard the onward step of progress.

My mind is appalled at the thought of a political party having control of all the details that go to make up the sum total of our lives. Think of it for an instant, that the party in power shall have all authority to dictate the kind of books that shall be used in our schools and universities; government officials editing, printing, and circulating our literature, histories, magazines and press, to say nothing of the thousand and one activities of life that a people engage in, in a civilized society.

To my mind, the struggle for liberty is too great and the few steps we have gained have been won at too great a sacrifice, for the great mass of the people of this twentieth century to consent to turn over to any political party the management of our social and industrial affairs. For all who are at all familiar with history know that men will abuse power when they possess it. For these and other reasons, I, after careful study, and not through sentiment, turned from a sincere, earnest, political Socialist² to the non-political phase of Socialism—Anarchism³—because in its philosophy I

believe I can find the proper conditions for the fullest development of the individual units in society, which can never be the case under government restrictions.

¹ The question of how to preserve the rights of the worker in an industrial society

² One who espouses a belief that the production and distribution of goods should be controlled by the government

³ A belief that opposes any form of authority in society

31

In the passage, Parsons mainly presents herself as someone who is

[View Answer](#) ^

- A. rational in her analysis of political history.
- B. resentful over a recent turn of political events.
- C. conflicted about the future role of political parties.
- D. sympathetic to more than one political perspective.

Question Difficulty: Medium

32

A primary purpose of Parsons's speech is to

[View Answer](#) ^

- A. discuss a political philosophy that is starting to lose favor.
- B. outline a new approach to meeting the needs of oppressed groups.
- C. provide a rationale for adopting a different ideology.
- D. bring to light inconsistencies within the current political system.

Question Difficulty: Hard

33

In the passage, Parsons indicates that she once believed that

[View Answer](#) ^

- A. majority rule eliminates the need for individual activism.
- B. mobilization of the few benefits the majority.
- C. progress occurs when everyone works together toward a common goal.
- D. government can be used to make changes that citizens hope for.

Question Difficulty: Medium

34

It can reasonably be inferred from the passage that Parsons thinks positive social change will take place only when

[View Answer](#) ^

- A. masses of people are well versed in political history.
- B. political parties become committed to reform.
- C. fewer political parties are competing for people's votes.
- D. vocal individuals compel governments to address their concerns.

Question Difficulty: Medium

35

Which choice provides the best evidence for the answer to the previous question?

[View Answer](#) ^

- A. [lines 21-23](#) (“I came . . . many”)
- B. [lines 25-27](#) (“When . . . then”)
- C. [lines 28-34](#) (“I learned . . . politician”)
- D. [lines 65-69](#) (“To my . . . affairs”)

Question Difficulty: Medium

36

As used in [line 29](#), “fair” most nearly means

[View Answer](#) ^

- A. honest.
- B. pure.
- C. appealing.
- D. adequate.

Question Difficulty: Medium

37

Which argument does Parsons use to support her claim about the extent to which political parties can be trusted by voters?

[View Answer](#) ^

- A. Political parties are inherently corrupt because human nature is too easily corrupted by power.
- B. Parties often consolidate their power by making deals with opposing parties.
- C. Political parties always sacrifice their own ideals for pragmatic actions.
- D. Parties typically advance positions that are at odds with the beliefs of many of their members.

Question Difficulty: Medium

38

Based on the passage, Parsons would most likely predict that a political system that includes competing parties will consistently

[View Answer](#) ^

- A. lead to the suppression of views deemed unfavorable.
- B. fracture into an increasing number of warring parties.
- C. impede economic growth and therefore hinder progress.
- D. foster the development of an overly scientific approach to politics.

Question Difficulty: Medium

39

Which choice provides the best evidence for the answer to the previous question?

[View Answer](#) ^

- A. [lines 23-24](#) (“Government . . . science”)
- B. [lines 37-41](#) (“Second . . . control”)
- C. [lines 42-51](#) (“When . . . promise”)
- D. [lines 58-64](#) (“Think . . . society”)

Question Difficulty: Medium

40

According to the passage, Parsons's support for anarchism is based on the idea that anarchism

[View Answer](#) ^

- A. distributes wealth and property more equally among the population.
- B. is indifferent to the social status of its adherents.
- C. creates a situation that allows individuals to flourish.
- D. allows people to create an organizational structure whose leaders will champion the rights of the oppressed.

Question Difficulty: Medium

41

As used in line 75, "proper" most nearly means

[View Answer](#) ^

- A. ordinary.
- B. decent.
- C. conventional.
- D. suitable.

Question Difficulty: Easy

Questions 42-52 are based on the following passage and supplementary material.

This passage is adapted from Sabine Tebbich and Irmgard Teschke, "Why Do Woodpecker Finches Use Tools?" ©2013 by Cambridge University Press. Woodpecker finches use twigs to catch insect prey deep within trees.

In an experimental study we investigated whether twig tool use in woodpecker finches is acquired socially. This seemed plausible since previous studies have shown that several forms of tool use in primates develop via social learning. We took whole broods from the Galapagos Islands. We split each brood into two groups: half of the chicks were reared with a tool-using model, and the other half were reared with a non-tool-using model. We found that young woodpecker finches that never had the opportunity to watch tool use develop this ability with similar aptitude and reached distinct developmental steps that marked the appearance of new tool-oriented behavior at a similar age as their siblings that were given the chance to observe tool use in adult woodpecker finches. We concluded that, in contrast to chimpanzees, social learning is not necessary for the acquisition of this behavior in woodpecker finches. Instead, the developmental process seems to be strongly dependent on genetically fixed components. Interestingly, New Caledonian crows also appear to have a specific genetic

predisposition for tool use, as demonstrated by the finding that they develop basic use of stick tools without a tool-using model. However, in contrast to our study, a tool-using demonstrator (a human in the study on New Caledonian crows) stimulated faster development of tool use in juvenile New Caledonian crows. Field observations also show that New Caledonian crow parents scaffold the development of wide tool manufacture and use in juveniles for up to one year. Juveniles stay close to their parents and are provided with discarded tools. The early exposure to this discarded tool might help juveniles to form a mental template of functional tool design.

Information about woodpecker finches' social system can shed some light on the reasons for the strong genetic predetermination of tool use in this species. For one thing, in contrast to socially living primates, woodpecker finches are solitary and thus parents are likely to be the only available tool-using models. In such a system, reliance on social transmission from parents to offspring during an apparently very short period of association would be a highly risky endeavor. Where the likelihood of encountering important social information is uncertain, selection for a development process based on genetically fixed components could be advantageous, especially given that tool use provides an important part of the woodpecker finch's diet and seems crucial to survival during the dry season in the islands' Arid Zone.

Although our experiment showed that the development of tool use is based on a very specific genetic predisposition, we were able to demonstrate that non-social, individual learning does play an important role during the ontogeny [development within an organism's lifetime] of tool use in serving to improve the efficiency of this behavior. Five individuals developed tool-using techniques that deviated from the tool use performed by birds in the wild, most likely because our artificial crevices differed from natural crevices and tree holes. At some point during the study, each of these birds dropped their tool into the artificial crevice and pulled it out with an upward motion of their beak, thereby levering the prey to within reach at the front of the crevice. After initial success with this technique, the five birds significantly increased their use of this method. These and other observations on learning in tool-using woodpecker finches have altered our conception of how this behavior develops. The ontogenetic unfolding of this complex behavior is determined by a very specific genetic component, but is enhanced through individual learning.

Table 1

Tool Use by Woodpecker Finches Raised with and without Tool-Using Models
Tool-use behavior

Mean instances of behavior per observation by experimental condition

	Raised with tool-using model	Raised without tool-using model
Picking up twig	7.7	10.7
Manipulating Twig	7.4	10.7
Using Twig as Tool	3.6	5.6
Success with tool	0.83	0.94

There is no significant difference in results between the two groups for any of the four tool-use behaviors tested.

Table 2

Effect of Success with Unique Levering Technique on Frequency of Levering Technique Use by Woodpecker Finches

Before first success at acquiring prey
Median frequency of prey-levering attempts per observation

1

Range of prey-levering attempts per observation

0–5

After first success at acquiring prey

Median frequency of prey-levering attempts per observation

11

Range of prey-levering attempts per observation

4–21

Source: Data from Sabine Tebbich et al., “Do Woodpecker Finches Acquire Tool-Use by Social Learning?” ©2001 by The Royal Society.

42

The main purpose of the passage is to

[View Answer](#) ^

- A. contrast the tool-using behavior of wild and captive-raised woodpecker finches.
- B. describe experiments intended to clarify the benefits of tool use for woodpecker finches.
- C. discuss a study of the differences between primates and woodpecker finches with respect to tool use.
- D. present research that explains the development of tool-using behavior in woodpecker finches.

Question Difficulty: Medium

43

It can reasonably be inferred from the passage that the design of the researchers' experiment helped to minimize the possibility that

[View Answer](#) ^

- A. there were important differences between the two groups of chicks other than the model with which the groups were reared.
- B. responses of any individual chick to the model were influenced by the responses of other chicks in the same group.
- C. acquisition of tool-using behavior by chicks in both groups was influenced by the particular potential tools available.
- D. identifying when chicks reached different developmental stages of tool-using behavior depended on human evaluations of chicks' actions.

Question Difficulty: Hard

44

Which choice provides the best evidence for the answer to the previous question?

[View Answer](#) ^

- A. *[error]* (“In an . . . socially”)
- B. *[error]* (“This . . . learning”)
- C. *[error]* (“We took . . . model”)
- D. *[error]* (“We concluded . . . finches”)

Question Difficulty: Medium

45

As used in *[error]* and lines 43-44, “fixed” most nearly means

[View Answer](#) ^

- A. repaired.
- B. determined.
- C. attached.
- D. prepared.

Question Difficulty: Medium

46

The parenthetical statement in *[error]* (“a human . . . crows”) mainly serves to

[View Answer](#) ^

- A. contrast the prevalence of tool use among New Caledonian crows with the prevalence of tool use among woodpecker finches.
- B. explain why the results of the New Caledonian crow study conflicted with those of the woodpecker finch study.
- C. indicate a difference between the design of the New Caledonian crow study and that of the woodpecker finch study.
- D. suggest that the methods of the New Caledonian crow study should be adopted for the study of woodpecker finches.

Question Difficulty: Medium

47

The passage most strongly suggests that the social system of primates allows for young animals to

[View Answer](#) ^

- A. regularly observe other members of their species using tools.
- B. reach maturity without having learned to use tools to acquire food.
- C. restrict the transmission of tool-related knowledge to close relatives only.
- D. experiment with tool designs at little risk of lost food if the designs are unsuccessful.

Question Difficulty: Easy

48

Based on the passage, the researchers' conclusion that the woodpecker finches who used the novel levering technique were displaying individual learning is supported in part by the fact that

[View Answer](#) ^

- A. no genetic variations were common to all those finches that were not also common to all the finches that did not use that technique.
- B. those finches tended to stop using the technique after the researchers altered the artificial crevices to reduce the effectiveness of the technique.
- C. the portion of that technique that deviates from typical tool-using behavior takes place inside a crevice and is therefore difficult for other finches to observe and acquire socially.
- D. there is probably not a naturally occurring circumstance that would have favored the development of that technique and its prior transmission to those finches.

49

Which choice provides the best evidence for the answer to the previous question?

[View Answer](#) ^

- A. [lines 54-57](#) (“Five . . . holes”)
- B. [lines 57-61](#) (“At some . . . crevice”)
- C. [lines 61-63](#) (“After . . . method”)
- D. [lines 65-68](#) (“The ontogenetic . . . learning”)

Question Difficulty: Hard

50

As used in [line 65](#), “conception” most nearly means

[View Answer](#) ^

- A. beginning.
- B. understanding.
- C. design.
- D. invention.

Question Difficulty: Easy

51

According to table 1, the mean number of instances that woodpecker finches raised without tool-using models used twigs as tools was

[View Answer](#) ^

A. 10.7.

B. 7.4.

C. 5.6.

D. 3.6.

Question Difficulty: Easy

52

The data in table 2 best support which statement about the woodpecker finches that used the unique levering technique to acquire prey?

[View Answer](#) ^

- A. At least one of them attempted the technique five times before successfully acquiring prey.
- B. After the first success at acquiring prey, a few of them ceased using the technique altogether.
- C. After the first success at acquiring the prey, none of them attempted the technique more than five times.
- D. None of them were successful in their first attempt with the technique.

Question Difficulty: Medium

Questions 1-11 are based on the following passage.

From Book to Humument

On November 5, 1966, British artist Tom Phillips was rummaging through a warehouse full of bargain **1** books, he found an old, hardbound Victorian novel by W. H. Mallock. The book, which Phillips purchased for mere pennies, **2** was titled *A Human Document*, and he decided to make it the raw material for his next art project: a mixed-media book of erasure poetry. **3** This project would later bloom into a decades-long obsession, as he continued to **4** amend the near-forgotten novel into a kaleidoscopic work of art.

Phillips **5** initially worked on the book for over five years; instead, he would “treat” it. In this process, Phillips **6** would open the book to a random page then erase, cross out, paint over, or otherwise manipulate the text so that the carefully selected remaining words would create a unique, poetic message. In one of his earliest treatments, he folded the title page of Mallock’s novel, truncating “*A Human Document*” to “*A Humument*.” This struck Phillips as a particularly evocative title. “*Humument*” was an “earthy word,” as he put it, “with echoes of humanity and monument.” **7** However, the newly coined word revealed something of his method, how Phillips would “hew” his own meaning out of the larger text of the novel, carving away words like a sculptor carves away stone to reveal a new artwork beneath.

[1] Phillips’s first treatments were done mostly with ink and watercolors, but soon he also incorporated other designs—from abstract shapes and collages to elaborate drawings—to cover or accompany the text. [2] Even after he’d treated each of the novel’s 367 pages and put *A Humument* on display, first as a unique artwork in 1973 **8** and later, as a book published in 1980, Phillips’s work wasn’t done. [3] In his 1973 treatment of page 50, for example, Phillips painted the page with six green petri-dish-like circles, covering all but the playfully absurd lines, “ten hours; / bands play. It is a / political revolution.” [4] For the 1996 version, Phillips covered the page with a richly drawn self-portrait, leaving the egomaniacal message, “At last—welcome! / my own / myself!” [5] Though diverse in artistic style, **9** they reveal Phillips’s sense of humor, his delight in “fish[ing] the odd joke out of a dry text.” **10**

In 2016, Phillips reflected on his lifelong engagement with *A Human Document*. **11** He wrote the introduction to the sixth and final edition. In the introduction, he observed that he’d “yet to find a situation, sentiment or thought which [Mallock’s] words cannot be adapted to cover.” Across its colorful pages of images and text, *A Humument* shows the infinite, creative possibilities that can be found—even in a dusty, old book.

1

[View Answer](#) ^

- A. NO CHANGE
- B. books when he found
- C. books; finding
- D. books. When finding

Question Difficulty: Easy

[View Answer](#) ^

- A. NO CHANGE
- B. were
- C. have been
- D. are being

Question Difficulty: Easy

3

At this point, the writer is considering adding the following sentence.

Copies of *A Human Document* can still be obtained, though the price is more than a few cents now.

Should the writer make this addition here?

[View Answer](#) ^

- A. Yes, because it helps explain why the novel was sold so cheaply.
- B. Yes, because it provides context about Phillips's source material for the project.
- C. No, because it detracts from the focus of the passage on Phillips's artistic use of the book.
- D. No, because it fails to explain why Phillips would choose to use this particular book.

Question Difficulty: Easy

[View Answer](#) ^

- A. NO CHANGE
- B. mutate
- C. transform
- D. rehabilitate

Question Difficulty: Easy

5

Which choice most effectively sets up the information in the rest of the sentence?

[View Answer](#) ^

- A. NO CHANGE
- B. noted that the book's text contained a diverse vocabulary;
- C. was unfamiliar with *A Human Document* before buying it;
- D. never planned to read Mallock's book;

Question Difficulty: Medium

[View Answer](#) ^

- A. NO CHANGE
- B. had opened
- C. opens
- D. opened

Question Difficulty: Easy

[View Answer](#) ^

- A. NO CHANGE
- B. Therefore,
- C. For example,
- D. Furthermore,

Question Difficulty: Medium

[View Answer](#) ^

- A. NO CHANGE
- B. and later as a book
- C. and later as a book—
- D. and, later as a book

Question Difficulty: Medium

[View Answer](#) ^

- A. NO CHANGE
- B. the years
- C. both versions
- D. those

Question Difficulty: Medium

10

The writer wants to add the following sentence to this paragraph.

He returned to A Humument again and again, scouring the text for new opportunities.

The best placement for the sentence is

[View Answer](#) ^

- A. before sentence 1.
- B. after sentence 2.
- C. after sentence 3.
- D. after sentence 5.

Question Difficulty: Medium

11

Which choice most effectively combines the sentences at the underlined portion?

[View Answer](#) ^

- A. In the sixth and final edition's introduction, an introduction that he wrote,
- B. For the final edition, the sixth, writing in the introduction,
- C. The sixth edition was the final edition; in the introduction, in writing,
- D. Writing in the sixth and final edition's introduction,

Question Difficulty: Easy

[View Answer](#) ^

- A. NO CHANGE
- B. Researchers have long warned of and cautioned against
- C. Researchers have for a while—a long time, in fact—warned of
- D. Researchers have long warned of

Question Difficulty: Medium

Which choice most effectively combines the sentences at the underlined portion?

[View Answer](#) ^

- A. There was an observation in a 2018 study by University of Maryland geology professor Sujay Kaushal, and it was that
- B. As observed in a 2018 study led by University of Maryland geology professor Sujay Kaushal,
- C. Sujay Kaushal is a geology professor at the University of Maryland; in a 2018 study that Kaushal led, it was observed that
- D. Leading a 2018 study was University of Maryland geology professor Sujay Kaushal, and in the study was an observation:

Question Difficulty: Medium

Questions 12-22 are based on the following passage.

Freshwater Salinization Syndrome

12 For a while, researchers have long warned of salinization, the increasing concentration of dissolved salts, in freshwater ecosystems. Less attention, however, has been paid to the role of alkalization, or rising pH, in the salinization process. 13 University of Maryland geology professor Sujay Kaushal led a 2018 study. In this study was the observation that alkalization and salinization are crucially linked occurrences in North American fresh waterways. Given the environmental threat of what Kaushal terms “freshwater salinization syndrome,” it is imperative that scientists 14 take a more holistic approach and account for alkalization processes when studying waterway salinization.

[1] Traditional salinization tests that solely 15 focus on sodium chloride, a salt often used to deice roads, are inadequate in studying the increased salinity and pH of freshwater systems. [2] Sodium chloride does not make water more alkaline, but other salts—such as those containing positive ions of calcium, potassium, and magnesium—do. [3] Such salts are released by numerous processes, including mining, agriculture, and, counterintuitively, acid rain. [4] Regardless of how they enter waterways, “these ‘cocktails’ of salts can be more toxic than just one salt, as some ions can displace and release other ions from soils and rocks, compounding the problem,” Kaushal explains. [5] As Kaushal’s study shows, these effects are widespread in the United 16 States, of the 232 stream and river monitoring sites examined in the study, 66 percent showed trends of increasing pH. 17

Together, alkalization and salinization 18 poses a double threat to the health of freshwater ecosystems and the animals that rely on them. Among 19 its many effects, higher salinity can cause greater levels of phosphates to be leached into rivers and streams, fostering the growth of harmful algae and bacteria. Elevated pH, meanwhile, 20 could have several causes such as changes in weathering, certain fertilizers, or even the process of photosynthesis.

Due to the linked ecological and biological costs of high salt concentrations and high pH in freshwater 21 systems. Scientists must consider both when assessing a freshwater ecosystem’s overall health. This is not to say that existing salinization studies are invalid; sodium chloride remains an important source of salinization and requires monitoring, but so do pH-increasing salts. 22 In fact, Kaushal points out that adding one type of salt to the environment can actually encourage the mobilization of other kinds of salt, exacerbating the freshwater salinization syndrome.

14

Which choice most effectively sets up the main argument of the passage?

[View Answer](#) ^

- A. NO CHANGE
- B. keep in mind that the syndrome is most prevalent in densely populated areas
- C. recognize symptoms of the syndrome, such as infrastructure corrosion and contaminant mobilization,
- D. consider the research methods and technologies used

Question Difficulty: Medium

[View Answer](#) ^

- A. NO CHANGE
- B. were focusing
- C. will focus
- D. had been focused

Question Difficulty: Easy

[View Answer](#) ^

- A. NO CHANGE
- B. States: of
- C. States; of,
- D. States of

Question Difficulty: Medium

17

The writer wants to add the following sentence to this paragraph.

While acid rain itself lowers pH, it breaks down minerals containing alkaline salts, ultimately raising pH in waterways.

The best placement for the sentence is

[View Answer](#) ^

- A. after sentence 2.
- B. after sentence 3.
- C. after sentence 4.
- D. after sentence 5.

Question Difficulty: Medium

[View Answer](#) ^

A. NO CHANGE

B. has posed

C. pose

D. is posing

Question Difficulty: Medium

[View Answer](#) ^

- A. NO CHANGE
- B. it's
- C. their
- D. they're

Question Difficulty: Medium

Which choice most effectively supports the claim being made in the paragraph?

[View Answer](#) ^

- A. NO CHANGE
- B. was slightly mitigated in some areas following the Clean Air Act Amendments in 1990.
- C. can cause ammonium, a nutrient already present in water, to convert into toxic ammonia gas, resulting in decreased biodiversity.
- D. is the opposite of acidification and can stimulate the production of nitrate.

Question Difficulty: Medium

[View Answer](#) ^

- A. NO CHANGE
- B. systems; scientists
- C. systems, and scientists
- D. systems, scientists

Question Difficulty: Easy

Which choice provides the most effective conclusion to the passage?

[View Answer](#) ^

- A. NO CHANGE
- B. According to Kaushal, many cities have inefficient salt-spreading equipment that could be updated to ultimately help with efforts to manage the freshwater salinization syndrome.
- C. What Kaushal's freshwater salinization syndrome provides is a critical conceptual framework that can help scientists make more effective use of existing research and design better studies in the future.
- D. Ultimately, Kaushal notes, salinization and alkalinization could not only affect freshwater ecosystems but coastal regions as well.

Question Difficulty: Medium

Questions 23-33 are based on the following passage and supplementary material.

Rave Reviews for Professional Reviewers

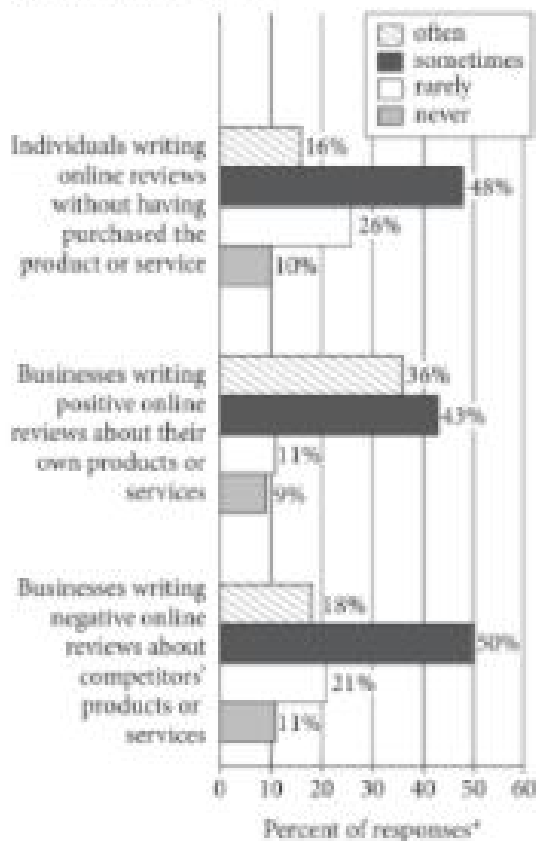
An individual who wants to purchase a new laptop computer can get reviews of the available models from one of the many websites where customers post their own reviews. However, many consumers are concerned about the trustworthiness of anonymous customer appraisals or are simply overwhelmed by the countless, often conflicting **23** reviews, there is growing demand for the objective, reputable reviews provided by a professional reviewing service. Those who enjoy trying new products and sharing their opinions may even consider becoming professional reviewers who conduct **24** sizeable product research and report on their findings. As the example of David **25** Heim, who worked for more than 25 years at Consumer Reports, a leading reviewing service—shows, the field is ideal for those who want to use their expertise to provide honest information to consumers while learning about the latest technologies.

Professional review services, like Consumer Reports, The Wirecutter, and The Sweethome, offer expert advice. **26** Its technicians run tests on products such as cars, electronics, appliances, and household supplies—a task as exciting as it is difficult, given that professional reviewers often have to anticipate industry trends. Heim recalls, for example, a time in the 1990s when managing editors at his company held a meeting to discuss a product many **27** are not even hearing of: digital cameras. After a live demonstration, Heim and his team decided this was a product they should review for the public. Two years later, digital cameras became the second most popular product the company had reviewed.

Professional reviewers' commitment to fairness and accuracy should be particularly appealing to consumers since, according to market research, **28** product testers try all brands, not just the most popular ones. For example, a 2014 study found that 50 percent of those **29** surveyed believed that, businesses sometimes write negative reviews about competitors, and a further 18 percent believed businesses did so often. The individuals surveyed also thought that businesses write positive reviews of their own products or services, with 43 percent of respondents saying this happens sometimes and **30** 21 percent saying it happens often. And even when they did not suspect direct interference from the businesses, respondents **31** rarely considered whether reviews were honest: 48 percent thought that individuals sometimes write online reviews without purchasing the products or services, and 16 percent thought that this occurs often.

Survey about Online Reviews of Products and Services

Note: Participants responded to the question "How often, if at all, do you think the following practices occur in online reviews?"



*Because of rounding, percentages may not add up to 100%.

Adapted from Jake Gammon, "Americans Rely On Online Reviews Despite Not Trusting Them."

©2014 by YouGov.

32 As the evidence shows, there is a growing need for product reviews consumers can trust.

Though it can be challenging to maintain the expertise needed to make informed evaluations, those excited about 33 getting a cool gig should consider lending their opinion to consumers who need it most.

[View Answer](#) ^

- A. NO CHANGE
- B. reviews; now that
- C. reviews, so
- D. reviews, therefore,

Question Difficulty: Hard

[View Answer](#) ^

- A. NO CHANGE
- B. spacious
- C. pervasive
- D. extensive

Question Difficulty: Easy

[View Answer](#) ^

- A. NO CHANGE
- B. Heim
- C. Heim—
- D. Heim;

Question Difficulty: Medium

[View Answer](#) ^

- A. NO CHANGE
- B. Our
- C. These
- D. Their

Question Difficulty: Easy

[View Answer](#) ^

- A. NO CHANGE
- B. had not even heard
- C. have not even heard
- D. will not even have heard

Question Difficulty: Medium

Which choice best introduces the main point of the paragraph?

[View Answer](#) ^

- A. NO CHANGE
- B. looking at nonprofessional reviews makes it difficult to spot market trends.
- C. consumers often prefer the cheapest products regardless of quality.
- D. people have many reservations about online customer reviews.

Question Difficulty: Hard

[View Answer](#) ^

- A. NO CHANGE
- B. surveyed, believed that,
- C. surveyed believed that
- D. surveyed, believed that:

Question Difficulty: Medium

30

The writer wants to use accurate information from the graph to support the point made earlier in the sentence. Which choice best accomplishes this goal?

[View Answer](#) ^

- A. NO CHANGE
- B. 9 percent saying it happens rarely.
- C. 36 percent saying it happens often.
- D. 11 percent saying it never happens.

Question Difficulty: Easy

31

Which choice offers an accurate interpretation of the graph?

[View Answer](#) ^

- A. NO CHANGE
- B. had doubts about the validity of customer reviews:
- C. did not purchase products or services with fraudulent reviews:
- D. preferred products or services with higher numbers of reviews:

Question Difficulty: Medium

32

Which choice provides the best transition from the information in the previous paragraph?

[View Answer](#) ^

- A. NO CHANGE
- B. Despite these drawbacks,
- C. Whatever the format,
- D. On the other hand,

Question Difficulty: Medium

Which choice best maintains the style and tone of the passage?

[View Answer](#) ^

- A. NO CHANGE
- B. working in a cutting-edge career
- C. snagging a job that's all the rage
- D. acquiring employment at the forefront

Question Difficulty: Medium

Questions 34-44 are based on the following passage.
The Myth of Homo Economicus

Classical economic theory is predicated on a bedrock assumption about human behavior: people make economic decisions **34** precisely as they did in the nineteenth century. The law of supply and demand, for example, which holds that as the supply of an item increases, its price decreases, assumes that each shopper will strive to pay **35** as small as possible for the item. From the nineteenth century until quite recently, **36** there was this rational “economic man,” Homo economicus. He formed the basis of most economic models.

37 Economic models vary, according to scholars in the emerging field of behavioral economics: humans aren't rational. In the real world, people make irrational economic decisions all the time. **38** However, studies of savings behavior show that many workers choose not to enroll in retirement-savings plans offered by their employers even when these plans are **39** ostentatiously in the workers' interest. Behavioral economists who have studied the issue blame the “default effect,” according to which people given a choice tend to favor the option presented as the default or status quo. When the default option—that is, the choice that requires no direct action to be taken—is not to enroll in a **40** plan—and many employees don't sign up. However, when the default option is enrollment—that is, when companies automatically sign workers up for a plan and require them to take direct action to **41** unenroll—far more workers make the decision to save for retirement.

As the example above suggests, behavioral economists not only analyze human behavior but also identify mechanisms by which to change it. Sometimes the behaviors studied go beyond the strictly economic. In a 2013 study, Katherine Milkman and two coauthors examined what they call “temptation **42** bundling”: tying a so-called “want experience” (in this case, listening to a favorite audiobook) with a so-called “should behavior” **43** (one which they should be doing anyway). Milkman found that participants who limited their audiobook listening to time spent at the gym worked out 51 percent more frequently than the control participants, and 61 percent of those in the experimental group even **44** purchased gym-only access to audiobooks. As Milkman points out, if other kinds of temptation-bundling options were available, such as Netflix subscriptions that can be accessed only at a gym, more people would make the rational decision to exercise more often.

In short, behavioral economics offers a nuanced consideration of the forces that influence human decision-making, fundamentally complicating classical economic theory. In the eyes of behavioral economists, rational, self-interested Homo economicus does not exist; on the other hand, with the right interventions, people can—and should—be nudged to act in accordance with the old assumptions.

34

Which choice best sets up the information that follows in the paragraph and the passage?

[View Answer](#) ^

- A. NO CHANGE
- B. based on general principles.
- C. rationally and in their own self-interest.
- D. whenever they choose which goods or services to buy.

Question Difficulty: Hard

[View Answer](#) ^

- A. NO CHANGE
- B. so small
- C. as little
- D. so little

Question Difficulty: Easy

Which choice most effectively combines the sentences at the underlined portion?

[View Answer](#) ^

- A. there was this rational "economic man"; Homo economicus
- B. this rational "economic man," Homo economicus,
- C. "economic man," being the rational Homo economicus,
- D. Homo economicus was a rational "economic man" and

Question Difficulty: Medium

37

Which choice provides the most effective transition from the previous paragraph to the information that follows in the sentence?

[View Answer](#) ^

- A. NO CHANGE
- B. A comparison is relevant,
- C. Another truth emerged,
- D. There was just one problem,

Question Difficulty: Medium

[View Answer](#) ^

- A. NO CHANGE
- B. Moreover,
- C. In other words,
- D. For instance,

Question Difficulty: Easy

[View Answer](#) ^

- A. NO CHANGE
- B. expansively
- C. overwhelmingly
- D. extravagantly

Question Difficulty: Medium

[View Answer](#) ^

- A. NO CHANGE
- B. plan, and many
- C. plan. Many
- D. plan, many

Question Difficulty: Medium

[View Answer](#) ^

A. NO CHANGE

B. unenroll,

C. unenroll:

D. unenroll;

Question Difficulty: Hard

[View Answer](#) ^

- A. NO CHANGE
- B. bundling^o tying:
- C. bundling,^o tying;
- D. bundling^o; tying

Question Difficulty: Hard

43

Which choice provides an example that is most consistent with the other information in the sentence and the paragraph?

[View Answer](#) ^

- A. NO CHANGE
- B. (audiobooks were available to them while they exercised).
- C. (a behavior they might not enjoy).
- D. (exercising at a gym).

Question Difficulty: Medium

[View Answer](#) ^

- A. NO CHANGE
- B. had purchased
- C. purchase
- D. would purchase

Question Difficulty: Easy

1

The function f is defined by $f(x) = \frac{9}{2}x + 1$. What is the slope of the graph of $Y = f(x)$ in the xy -plane?

[View Answer](#) ^

A. $-\frac{9}{2}$

B. $-\frac{2}{9}$

C. $\frac{2}{9}$

D. $\frac{9}{2}$

Question Difficulty: Easy

2

If $2(x - 4) = x$, what value of x makes the equation true?

[View Answer](#) ^

A. $\frac{4}{3}$

B. $\frac{8}{3}$

C. 4

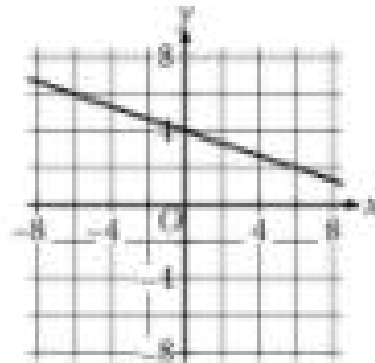
D. 8

Question Difficulty: Easy

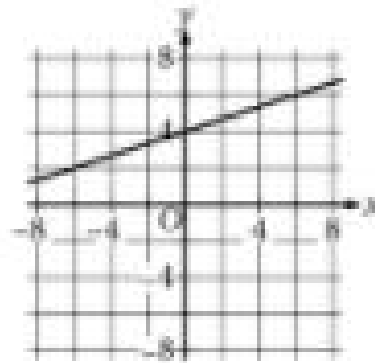
What is the graph of $y = 3x + 4$?

[View Answer](#) ^

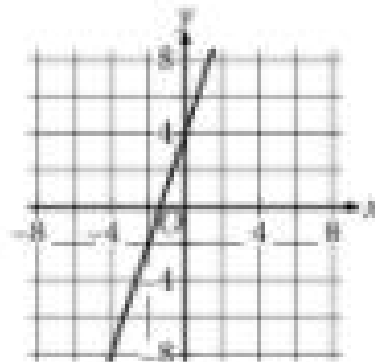
A.



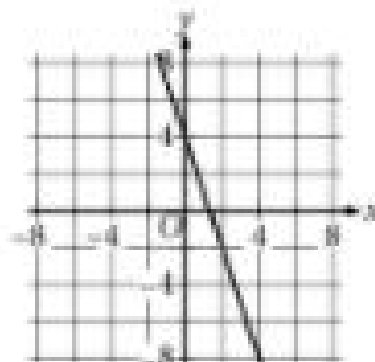
B.

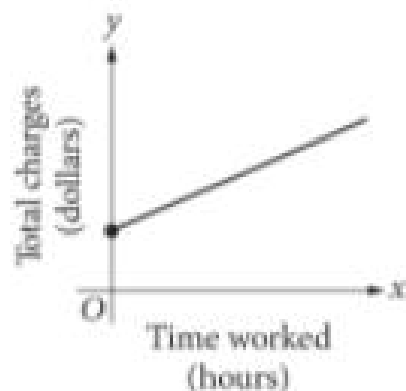


C.



D.





The graph represents the total charges, in dollars, by a contractor for x hours of work. The contractor charges a onetime fee plus an hourly rate. What is the best interpretation of the slope of the graph?

[View Answer](#) ^

- A. The contractor's hourly rate
- B. The contractor's onetime fee
- C. The total amount that the contractor charges
- D. The maximum amount that the contractor charges

Question Difficulty: Medium

5

$$z = \frac{x+3}{2y}$$

The given equation relates the distinct positive real numbers x , y , and z . Which equation correctly expresses x in terms of y and z ?

[View Answer](#) ^

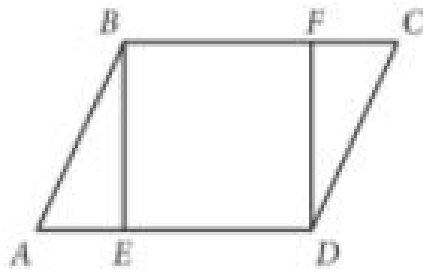
A. $x = 2yz + 3$

B. $x = 2yz - 3$

C. $x = \frac{z}{2y} - 3$

D. $x = \frac{z-3}{2y}$

Question Difficulty: Medium



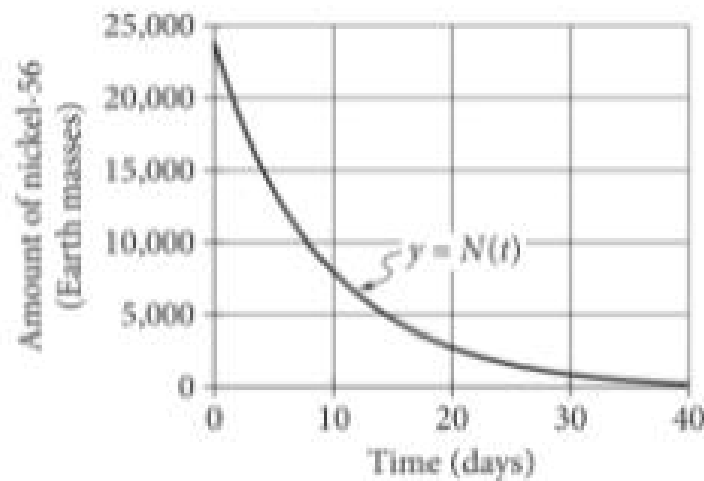
Note: Figure not drawn to scale.

In the figure shown, ABCD is a parallelogram and EBF is a square. The area of ABCD is 112 square meters (m^2), and the area of EBF is 64 m^2 . What is the length, in meters, of \overline{AE} ?

[View Answer](#) ^

- A. 6
- B. 8
- C. 14
- D. 23

Question Difficulty: Medium



The function N models the amount of nickel-56, in Earth masses, remaining t days after a massive star explodes. About how many Earth masses of nickel-56 were there when the star exploded?

[View Answer](#) ^

- A. 3,000
- B. 8,000
- C. 12,000
- D. 24,000

Which of the following pieces of information is sufficient to prove that triangle ABC is an isosceles triangle?

1. \overline{AB} is congruent to \overline{BC} .
2. $\angle A$ is congruent to $\angle C$.

[View Answer](#) ^

- A. I is sufficient, but II is not.
- B. II is sufficient, but I is not.
- C. Either I or II is sufficient.
- D. Neither I nor II is sufficient.

Question Difficulty: Medium

9

Which expression is equivalent to $\frac{2+3x}{16-81x^4}$, where $x > 1$?

[View Answer](#) ^

A. $\frac{1}{8-27x^3}$

B. $8-27x^3$

C. $\frac{1}{(4+9x^2)(2-3x)}$

D. $(4+9x^2)(2-3x)$

Question Difficulty: Medium

$$3x^2 - 7x - 1 = 0$$

What are the solutions to the given equation?

[View Answer](#) ^

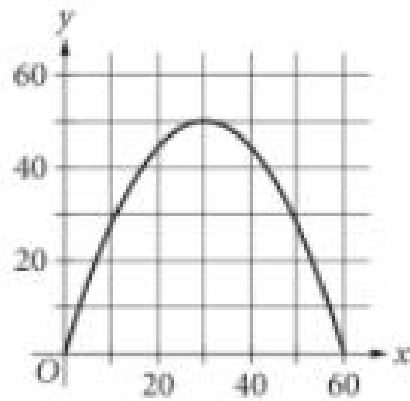
A. $x = \frac{7 \pm \sqrt{37}}{6}$

B. $x = \frac{7 \pm \sqrt{61}}{6}$

C. $x = \frac{-7 \pm \sqrt{37}}{6}$

D. $x = \frac{-7 \pm \sqrt{61}}{6}$

Question Difficulty: Medium



The graph shown models the profit y , in thousands of dollars, and the number of products sold x , in thousands, for a certain company.

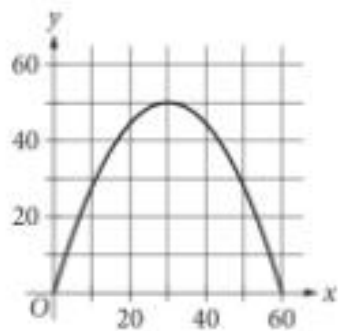
Which equation represents this model?

[View Answer](#) ^

A. $y = \frac{1}{18}x^2$

B. $y = -\frac{1}{18}x^2 + 50$

C. $y = 50 - \frac{1}{18}(x - 30)^2$



The graph shown models the profit y , in thousands of dollars, and the number of products sold x , in thousands, for a certain company. Which equation represents this model?

[View Answer](#) ^

A. $y = \frac{1}{18}x^2$

B. $y = -\frac{1}{18}x^2 + 50$

C. $y = 50 - \frac{1}{18}(x - 30)^2$

D. $y = 50 + \frac{1}{18}(x - 30)^2$

Question Difficulty: Medium

12

How many solutions does the equation $3x - 8 = x + 2(x - 4)$ have?

[View Answer](#) ^

- A. Zero
- B. Exactly one
- C. Exactly two
- D. Infinitely many

Question Difficulty: Medium

13

Which expression is equivalent to $k^{\frac{5}{16}} \left(k^{\frac{3}{2}}\right)^{\frac{5}{8}}$, where $k > 0$?

[View Answer](#) ^

A. \sqrt{k}

B. $\sqrt[4]{k^5}$

C. $\sqrt[8]{k^5}$

D. $\sqrt[15]{k^{16}}$

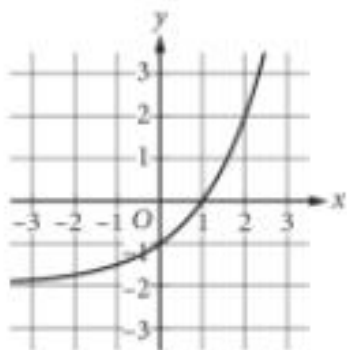
Question Difficulty: Medium

A company offers its salespeople two different weekly compensation plans. Salespeople on Plan X earn \$1,000 plus a 10% commission on their sales each week. Salespeople on Plan Y earn \$500 plus a 20% commission on their sales each week. Which inequality models the amount in sales each week, d dollars, for which salespeople on Plan X earn more than salespeople on Plan Y?

[View Answer](#) ^

- A. $d < 5,000$
- B. $d > 5,000$
- C. $d < 1,500$
- D. $d > 1,500$

Question Difficulty: Hard



What is an equation of the graph shown?

[View Answer](#) ^

A. $y = 2^x + 2$

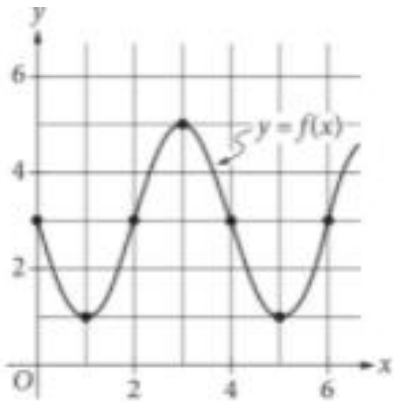
B. $y = 2^x + 1$

C. $y = 2^x - 1$

D. $y = 2^x - 2$

Question Difficulty: Hard

16



The graph of the function f is shown. What is the value of $f(0)$?

[View Answer](#) ^

Question Difficulty: Easy

17

$$x^2 + 2x + 1 = 4$$

What is the positive solution to the given equation?

[View Answer](#) ^

Question Difficulty: Easy

18

The graph of a line in the xy -plane passes through the point $(6,2)$ and crosses the x -axis at the point $(10,0)$. The line crosses the y -axis at the point $(0,b)$. What is the value of b ?

[View Answer](#) ^

Question Difficulty: Medium

19

$$-3x + 4y = 4$$

$$4x - 3y = 0.5$$

The solution to the given system of equations is (x, y) . What is the value of y ?

[View Answer](#) ^

Question Difficulty: Hard

20

$$x^2 + y^2 + 6x + 5y = -\frac{45}{4}$$

The equation of a circle in the xy -plane is shown. What is the radius of the circle?

[View Answer](#) ^

Question Difficulty: Hard

1

Which equation has the same solution as $8x = 2x + 12$?

[View Answer](#) ^

A. $10x = -12$

B. $10x = 12$

C. $6x = -12$

D. $6x = 12$

Question Difficulty: Easy

2

The function k is defined by $k(x) = \frac{3x-5}{2x+3}$. What is the value of $k(1)$?

[View Answer](#) ^

A. $\frac{5}{2}$

B. $\frac{8}{5}$

C. $-\frac{2}{5}$

D. $-\frac{3}{2}$

Question Difficulty: Easy

3

When the temperature of water is 25 degrees Celsius, sound travels through the water at a constant speed of about 1,500 meters per second. At the same temperature, about how far, in meters, would sound travel through the water in 15 seconds?

[View Answer](#) ^

- A. 37,500
- B. 22,500
- C. 375
- D. 100

Question Difficulty: Easy

4

A digital artist resized a rectangular image. The ratio of the length to the width of the image did not change. The width of the new image is 3 times as long as the original width. If L is the length of the original image, which expression represents the length of the new image in terms of L ?

[View Answer](#) ^

A. $\frac{L}{3}$

B. $L - 3$

C. $3L$

D. $L + 3$

Question Difficulty: Easy

5

Questions 5 and 6 refer to the following information.

4, 5, 5, 6, 7, 8, 8, 9, 9, 9, 10

Eleven employees at a company were selected at random to participate in a survey. The survey included a question that asked the participants to rate their work satisfaction on a scale from 1 to 10. The list shows the eleven ratings of the participants.

Which of the following is closest to the percentage of participants who gave a rating of 5 ?

[View Answer](#) ^

- A. 9%
- B. 18%
- C. 27%
- D. 45%

Question Difficulty: Easy

6**Questions 5 and 6 refer to the following information.**

4, 5, 5, 6, 7, 8, 8, 9, 9, 9, 10

Eleven employees at a company were selected at random to participate in a survey. The survey included a question that asked the participants to rate their work satisfaction on a scale from 1 to 10. The list shows the eleven ratings of the participants.

What is the ratio of the number of participants who gave a rating of 6 or higher to the number of participants who gave a rating lower than 6 ?

[View Answer](#) ^

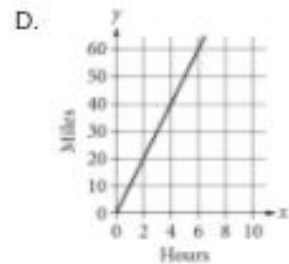
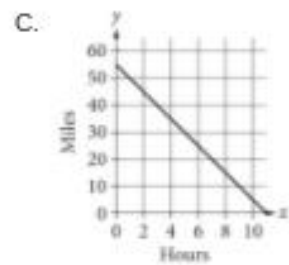
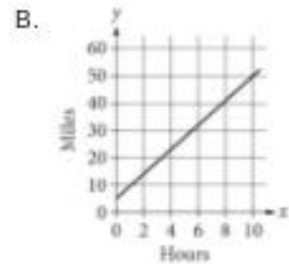
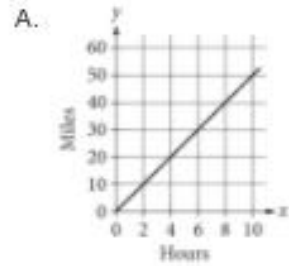
- A. 3 to 8
- B. 8 to 3
- C. 8 to 11
- D. 11 to 8

Question Difficulty: Easy

7

In Chicago in 1895, Frank Duryea won America's first automobile race by driving 52.4 miles in 10 hours and 23 minutes. If he drove at a constant rate, the approximate distance he drove y , in miles, during the race could be modeled by $y = 5x$, where x is the time, in hours, after the start of the race. Which graph best represents this relationship?

[View Answer](#) ^



Question Difficulty: Easy

8

A certain soccer field has an area of 7,000 square meters. What is this area in square feet? (Use 1 square meter = 10.76 square feet.)

[View Answer](#) ^

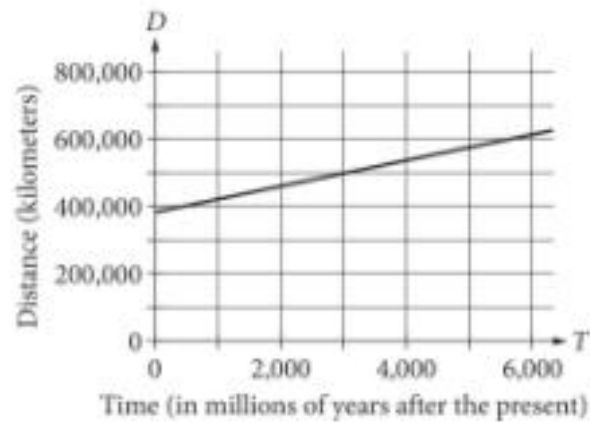
A. 60

B. 651

C. 75,320

D. 810,443

Question Difficulty: Easy



The graph shown models the relationship between the distance D , in kilometers, from Earth to the Moon and the time T , in millions of years after the present. Which of the following equations models this relationship?

[View Answer](#) ^

- A. $D = -38T - 385,000$
- B. $D = -38T + 385,000$
- C. $D = 38T - 385,000$
- D. $D = 38T + 385,000$

Question Difficulty: Easy

$$(2x + 1)^2 = 81$$

What are all possible solutions to the given equation?

[View Answer](#) ^

A. -9 and 9

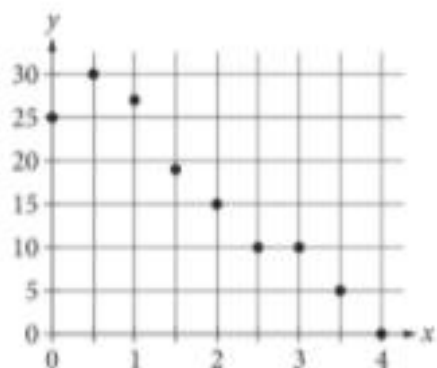
B. -5 and 4

C. 4

D. 40

Question Difficulty: Medium

The scatterplot shows the relationship between two variables, x and y .



Which of the following equations is the most appropriate linear model for the data shown?

[View Answer](#) ^

A. $y = -7 + 30x$

B. $y = 7 - 30x$

C. $y = 30 + 7x$

D. $y = 30 - 7x$

Question Difficulty: Easy

12

If $4(x + 1) = 16$, what is the value of $x + 1$?

[View Answer](#) ^

A. 3

B. 4

C. 11

D. 12

Question Difficulty: Medium

13

The equation $0.95c + 0.05n = 8.87$ represents the density of a copper-zinc alloy, where c is the density, in grams per cubic centimeter (g/cm^3), of copper, n is the density, in g/cm^3 , of zinc, and $8.87 \text{ g}/\text{cm}^3$ is the density of the alloy. The density of copper is $8.96 \text{ g}/\text{cm}^3$. What is the density of zinc, in g/cm^3 ?

[View Answer](#) ^

- A. 0.09
- B. 0.47
- C. 7.16
- D. 8.51

Question Difficulty: Medium

76, 72, 71, 71, 68, 66, 30

The list shown gives the total number of points scored by 7 teams in a curling tournament. The score 30 was recorded in error. If the score of 30 points is removed from the list, which statement best describes the effect on the mean and median number of points?

[View Answer](#) ^

- A. The mean increases, and the median decreases.
- B. The mean decreases, and the median increases.
- C. The mean decreases, and the median remains the same.
- D. The mean increases, and the median remains the same.

Question Difficulty: Medium

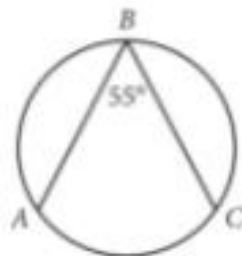
$$2x - 3y = 5$$

One of the two equations in a system is given. The system has an infinite number of solutions. Which equation could be the other equation in the system?

[View Answer](#) ^

- A. $4x - 6y = 10$
- B. $4x + 6y = 10$
- C. $2x - 3y = 10$
- D. $2x + 3y = 10$

Question Difficulty: Medium



Points A , B , and C lie on the circle as shown. What is the measure, in degrees, of arc \widehat{AC} ?

[View Answer](#) ^

- A. 55
- B. 110
- C. 220
- D. 305

Question Difficulty: Medium

$$y < \frac{1}{2}x + 4$$

$$y > -2x + 4$$

Which ordered pair (x,y) is a solution to the given system of inequalities in the xy -plane?

[View Answer](#) ^

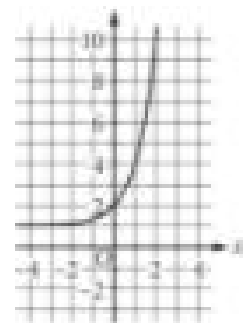
A. (0,2)

B. (1,0)

C. (1,5)

D. (2,4)

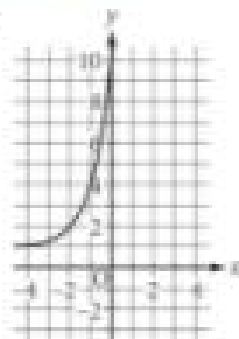
Question Difficulty: Medium



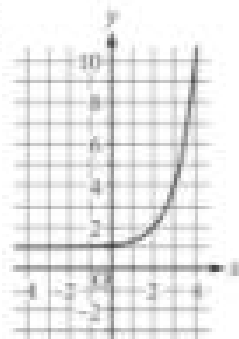
The graph of $y = f(x)$ is shown. What is the graph of $y = f(x) - 2$?

[View Answer](#) ^

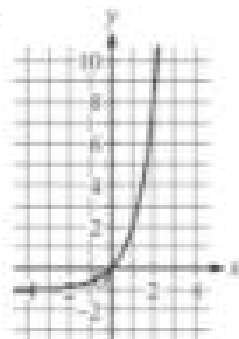
A.



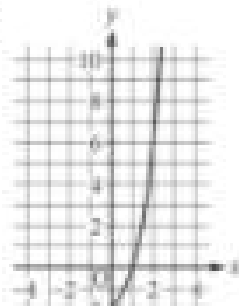
B.



C.



D.



The gross domestic product (GDP) of Malta was approximately 250.72 million US dollars in 1970. From 1970 to 1980, a model indicates the GDP increased by 15% per year compared to the previous year's GDP. Which function represents this model, where $f(t)$ is the estimated GDP, in millions of US dollars, and t is the number of years after 1970?

[View Answer](#) ^

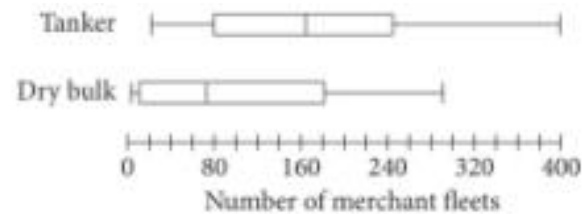
A. $f(t) = (1.15)^{250.72t}$

B. $f(t) = (250.72)^{1.15t}$

C. $f(t) = 1.15(250.72)^t$

D. $f(t) = 250.72(1.15)^t$

Question Difficulty: Medium



The box plots shown summarize the number of tanker and dry-bulk merchant fleets for 18 countries. Which of the following measures must be greater for the number of tanker merchant fleets than for the number of dry-bulk merchant fleets?

1. The median
2. The range

[View Answer](#) ^

- A. I only
- B. II only
- C. I and II
- D. Neither I nor II

Question Difficulty: Medium

$$x(x - 12) - 12(x - 12) = 0$$

How many distinct real solutions does the given equation have?

[View Answer](#) ^

- A. Zero
- B. Exactly one
- C. Exactly two
- D. Infinitely many

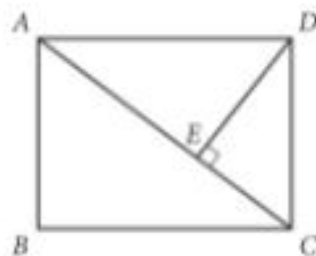
Question Difficulty: Medium

The average price per pound of oranges at a certain grocery store started at \$1.15 and increased at a constant rate each month for several months until the average price per pound reached \$1.41. The equation $1.15 + 0.065x = 1.41$ represents this situation, where x is the number of months after the average price per pound was \$1.15. Which is the best interpretation of the number 0.065 in this context?

[View Answer](#) ^

- A. The average price per pound of oranges
- B. The percentage increase in the average price per pound of oranges
- C. The rate of change, in dollars per month, in the average price per pound of oranges
- D. The total increase, in dollars, in the average price per pound of oranges after x months

Question Difficulty: Medium



In rectangle ABCD shown, $AB = 6$, $CD = 6$, and $AC = 10$. What is the length of \overline{CE} ?

[View Answer](#) ^

- A. 3.6
- B. 4.2
- C. 5
- D. 8

Question Difficulty: Medium

Questions 24 and 25 refer to the following information.

Store	List price	Discount	Installation fee
-------	------------	----------	------------------

W	\$a per tire	Buy 3 tires at list price and get the 4th tire free.	\$50 for all 4 tires
---	--------------	--	----------------------

X	\$90 per tire	Each tire is 15% off list price.	\$12 per tire
---	---------------	----------------------------------	---------------

Y	\$90 per tire	Buy 1 tire at list price and get the 2nd tire 50% off.	\$15 per tire
---	---------------	--	---------------

Z	\$110 per tire	Each tire is \$10 off list price.	\$18 per tire
---	----------------	-----------------------------------	---------------

The table shows the list price, discount, and installation fee for tires from four different car repair stores. Assume there is no sales tax and the information in the table is for tires of the same brand and size.

At Store X, a customer buys 4 tires and receives the discount but does not have the tires installed. What is the total cost to the customer?

[View Answer](#) ^

- A. \$54
- B. \$150
- C. \$300
- D. \$306

Question Difficulty: Medium

Questions 24 and 25 refer to the following information.

Store	List price	Discount	Installation fee
-------	------------	----------	------------------

W	\$ a per tire	Buy 3 tires at list price and get the 4th tire free.	\$50 for all 4 tires
---	-----------------	--	----------------------

X	\$90 per tire	Each tire is 15% off list price.	\$12 per tire
---	---------------	----------------------------------	---------------

Y	\$90 per tire	Buy 1 tire at list price and get the 2nd tire 50% off.	\$15 per tire
---	---------------	--	---------------

Z	\$110 per tire	Each tire is \$10 off list price.	\$18 per tire
---	----------------	-----------------------------------	---------------

The table shows the list price, discount, and installation fee for tires from four different car repair stores. Assume there is no sales tax and the information in the table is for tires of the same brand and size.

Store W's total expenses for selling and installing 4 tires is \$100. Which function represents the profit $p(a)$, in dollars, from selling and installing 4 tires to which the store's discount is applied? (profit = total amount of money received – expenses)

[View Answer](#) ^

A. $p(a) = 3a + 50$

B. $p(a) = 3a - 50$

C. $p(a) = 4a + 50$

D. $p(a) = 4a - 50$

26

The height of a certain tree in 2016 was 1.35 times the height of the tree in 2011. By what percentage did the height of the tree increase from 2011 to 2016?

[View Answer](#) ^

- A. 0.35%
- B. 1.35%
- C. 35%
- D. 135%

Question Difficulty: Medium

A study conducted by a mobile phone company found that the average battery life of a random sample of its phones is 4.6 hours, with an associated margin of error of 0.5 hours. The study was then repeated with a much larger sample size, with the mean and margin of error of the new sample being calculated in the same way as the original study. Which of the following is most likely true?

[View Answer](#) ^

- A. The margin of error from the new study is larger than the margin of error from the original study.
- B. The margin of error from the new study is smaller than the margin of error from the original study.
- C. The mean from the new study is larger than the mean from the original study.
- D. The mean from the new study is smaller than the mean from the original study.

Question Difficulty: Medium

$$L_1 = 10(0.89)^d$$

$$L_2 = 9.75 - 0.83d$$

An exponential equation and a linear equation are given. Each equation estimates the luminosity, in units of billions of solar luminosities, for a Type Ia supernova d days after its peak luminosity, for $d \leq 6$. The luminosity, in billions of solar luminosities, estimated by the linear equation 3 days after its peak luminosity is how much greater than the luminosity estimated by the exponential equation?

[View Answer](#) ^

- A. 0.21
- B. 2.1
- C. 21
- D. 210

Question Difficulty: Medium

A bag contains x apples, y oranges, and z pears. If one of these fruits is selected at random, what is the probability of selecting a fruit that is not an orange?

[View Answer](#) ^

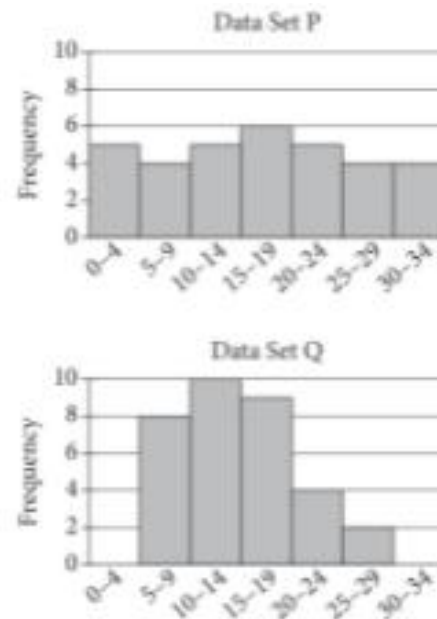
A. $\frac{x+z}{y}$

B. $\frac{x+z-y}{x+y+z}$

C. $1 - \frac{y}{x+z}$

D. $1 - \frac{y}{x+y+z}$

Question Difficulty: Hard

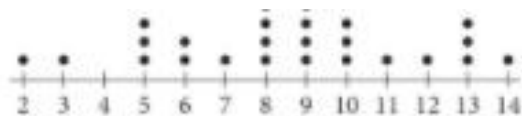


The histograms shown summarize two data sets, P and Q. Which of the following statements best compares the ranges and standard deviations of the two data sets?

[View Answer](#) ^

- A. Data set P has a greater range and a greater standard deviation than data set Q.
- B. Data set Q has a greater range and a greater standard deviation than data set P.
- C. Data set P has a greater range but a smaller standard deviation than data set Q.
- D. Data set Q has a greater range but a smaller standard deviation than data set P.

Question Difficulty: Hard



What is the median of the 25 data values represented in the dot plot above?

[View Answer](#) ^

Question Difficulty: Medium

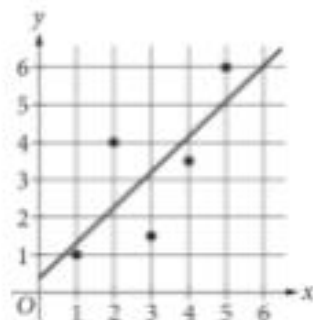
$$0.10x + 0.20y = 0.18(x + y)$$

The given equation represents a volume x , in gallons, of a 10% saltwater solution that will be mixed with a volume y , in gallons, of a 20% saltwater solution to produce an 18% saltwater solution. What volume, in gallons, of the 20% saltwater solution will be needed if 50 gallons of the 10% saltwater solution is used?

[View Answer](#) ^

Question Difficulty: Medium

The scatterplot shows the relationship between two variables, x and y . A line of best fit is also shown.



For how many of the data points does the line of best fit predict a greater y -value than the actual y -value?

[View Answer](#) ^

Question Difficulty: Medium

34

If $ax - 3$ is a factor of $6x^3 + 27x^2 - 54x$, where a is a positive constant, what is the value of a ?

[View Answer](#) ^

Question Difficulty: Hard

35

Set K consists of all the positive integers that are less than or equal to 150, where none of the integers are repeated. If a number is selected at random from set K, what is the probability of selecting a number that is even and less than or equal to 30 ? (Express your answer as a decimal or fraction, not as a percent.)

[View Answer](#) ^

Question Difficulty: Hard

36

The volume of sphere A is 20 cubic centimeters. Sphere B has a radius that is 2 times the radius of sphere A. What is the volume, in cubic centimeters, of sphere B?

[View Answer](#) ^

Question Difficulty: Hard

37

When Karina walks from home to work, she burns 5.3 calories per minute, and when she rides her bike from home to work she burns 6.4 calories per minute. If Karina spends a total of 6 hours walking and bicycling from home to work in a week and burns a total of 1941 calories doing these activities, how many minutes does she spend bicycling?

[View Answer](#) ^

Question Difficulty: Hard

38

A quadratic function can be used to model the height, in feet, of an object above the ground in terms of the time, in seconds, after the object was launched. According to the model, an object was launched into the air from a height of 0 feet and reached its maximum height of 784 feet 7 seconds after it was launched. Based on the model, what was the height, in feet, of the object 3 seconds after it was launched?

[View Answer](#) ^

Question Difficulty: Hard











Question	Correct Answer	Your Answer	Difficulty	Subscores/Cross-Test Scores
^	◇	◇	◇	READING
1	B		■□□	N/A
2	A		■ ■ □	N/A
3	C		■ ■ □	N/A
4	D		■ □ □	N/A
5	C		■ ■ □	N/A
6	C		■ ■ □	Words in Context
7	A		■ ■ ■	Words in Context
8	D		■ ■ □	N/A
9	D		■ ■ ■	Command of Evidence
10	A		■ ■ ■	N/A
11	B		■ □ □	Analysis in History/ Social Studies
12	A		■ □ □	Analysis in History/ Social Studies Words in Context
13	D		■ □ □	Analysis in History/ Social Studies
14	A		■ □ □	Analysis in History/ Social Studies Command of Evidence
15	A		■ □ □	Analysis in History/ Social Studies Words in Context
16	D		■ □ □	Analysis in History/ Social Studies
17	C		■ ■ □	Analysis in History/ Social Studies
18	A		■ ■ □	Analysis in History/ Social Studies
19	C		■ □ □	Analysis in History/ Social Studies Command of Evidence

20	C		<input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	Analysis in History/ Social Studies Command of Evidence
21	D		<input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	Analysis in Science Words in Context
22	B		<input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	Analysis in Science
23	B		<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>	Analysis in Science
24	C		<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>	Analysis in Science Command of Evidence
25	A		<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	Analysis in Science
26	B		<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>	Analysis in Science Words in Context
27	D		<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>	Analysis in Science
28	A		<input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	Analysis in Science
29	D		<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>	Analysis in Science
30	C		<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>	Analysis in Science Command of Evidence
31	A		<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>	Analysis in History/ Social Studies
32	C		<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	Analysis in History/ Social Studies
33	D		<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>	Analysis in History/ Social Studies
34	D		<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>	Analysis in History/ Social Studies
35	B		<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>	Analysis in History/ Social Studies Command of Evidence
36	C		<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>	Analysis in History/ Social Studies Words in Context
37	A		<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>	Analysis in History/ Social Studies

38	A			<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>	Analysis in History/ Social Studies
39	B			<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>	Analysis in History/ Social Studies
40	C			<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>	Analysis in History/ Social Studies
41	D			<input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	Analysis in History/ Social Studies Words in Context
42	D			<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>	Analysis in Science
43	A			<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	Analysis in Science
44	C			<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>	Analysis in Science
45	B			<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>	Analysis in Science Words in Context
46	C			<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>	Analysis in Science
47	A			<input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	Analysis in Science
48	D			<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	Analysis in Science Command of Evidence
49	A			<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	Analysis in Science Command of Evidence
50	B			<input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	Analysis in Science Words in Context
51	C			<input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	Analysis in Science Command of Evidence
52	A			<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>	Analysis in Science

Question	Correct Answer	Your Answer	Difficulty	Subscores/Cross-Test Scores
^	↕	↕	↕	WRITING
1	B		■ □ □	Standard English Conventions
2	A		■ □ □	Standard English Conventions
3	C		■ □ □	Command of Evidence Expression of Ideas
4	C		■ □ □	Words in Context Expression of Ideas
5	D		■ ■ □	Command of Evidence Expression of Ideas
6	A		■ □ □	Standard English Conventions
7	D		■ ■ □	Expression of Ideas
8	B		■ ■ □	Standard English Conventions
9	C		■ ■ □	Standard English Conventions
10	B		■ ■ □	Expression of Ideas
11	D		■ □ □	Words in Context Expression of Ideas
12	D		■ ■ □	Analysis in Science Words in Context Expression of Ideas
13	B		■ ■ □	Analysis in Science Words in Context Expression of Ideas
14	A		■ ■ □	Analysis in Science Command of Evidence Expression of Ideas
15	A		■ □ □	Standard English Conventions

16	B			■ ■ □	Standard English Conventions
17	B			■ ■ □	Analysis in Science Expression of Ideas
18	C			■ ■ □	Standard English Conventions
19	A			■ ■ □	Standard English Conventions
20	C			■ ■ □	Analysis in Science Command of Evidence Expression of Ideas
21	D			■ □ □	Standard English Conventions
22	C			■ ■ □	Analysis in Science Expression of Ideas
23	C			■ ■ ■	Standard English Conventions
24	D			■ □ □	Words in Context Expression of Ideas
25	C			■ ■ □	Standard English Conventions
26	D			■ □ □	Standard English Conventions
27	B			■ ■ □	Standard English Conventions
28	D			■ ■ ■	Expression of Ideas
29	C			■ ■ □	Standard English Conventions
30	C			■ □ □	Command of Evidence Expression of Ideas
31	B			■ ■ □	Command of Evidence Expression of Ideas
32	A			■ ■ □	Expression of Ideas
33	B			■ ■ □	Words in Context Expression of Ideas

34	C			Analysis in History/ Social Studies Command of Evidence Expression of Ideas
35	C			Standard English Conventions
36	B			Analysis in History/ Social Studies Words in Context Expression of Ideas
37	D			Analysis in History/ Social Studies Expression of Ideas
38	D			Analysis in History/ Social Studies Expression of Ideas
39	C			Analysis in History/ Social Studies Words in Context Expression of Ideas
40	D			Standard English Conventions
41	A			Standard English Conventions
42	A			Standard English Conventions
43	D			Analysis in History/ Social Studies Command of Evidence Expression of Ideas
44	A			Standard English Conventions

Question	Correct Answer	Your Answer	Difficulty	Subscores/Cross-Test Scores
^	◇	◇	◇	MATH - NO CALC
1	D		■ □ □	Heart of Algebra
2	D		■ □ □	Heart of Algebra
3	C		■ □ □	Heart of Algebra
4	A		■ ■ □	Heart of Algebra
5	B		■ ■ □	Passport to Advanced Math
6	A		■ ■ □	N/A
7	D		■ □ □	Analysis in Science Passport to Advanced Math
8	C		■ ■ □	N/A
9	C		■ ■ □	Passport to Advanced Math
10	B		■ ■ □	Passport to Advanced Math
11	C		■ ■ □	Analysis in History/ Social Studies Passport to Advanced Math
12	D		■ ■ □	Heart of Algebra
13	B		■ ■ □	Passport to Advanced Math
14	A		■ ■ ■	Heart of Algebra
15	D		■ ■ ■	Passport to Advanced Math
16	3		■ □ □	Passport to Advanced Math
17	1		■ □ □	Passport to Advanced Math
18	5		■ ■ □	Heart of Algebra
19	5/2,2.5		■ ■ ■	Heart of Algebra
20	2		■ ■ ■	N/A

Question	Correct Answer	Your Answer	Difficulty	Subscores/Cross-Test Scores
^	∧	∧	∧	MATH - WITH CALC
1	D	✓	■ □ □	Heart of Algebra
2	C		■ □ □	Passport to Advanced Math
3	B		■ □ □	Analysis in Science Problem Solving and Data Analysis
4	C		■ □ □	Problem Solving and Data Analysis
5	B		■ □ □	Analysis in History/ Social Studies Problem Solving and Data Analysis
6	B		■ □ □	Analysis in History/ Social Studies Problem Solving and Data Analysis
7	A		■ □ □	Analysis in History/ Social Studies Heart of Algebra
8	C		■ □ □	Problem Solving and Data Analysis
9	D		■ □ □	Analysis in Science Heart of Algebra
10	B		■ ■ □	Passport to Advanced Math
11	D		■ □ □	Problem Solving and Data Analysis
12	B		■ ■ □	Heart of Algebra
13	C		■ ■ □	Analysis in Science Heart of Algebra
14	D		■ ■ □	Problem Solving and Data Analysis
15	A		■ ■ □	Heart of Algebra
16	B		■ ■ □	N/A
17	D		■ ■ □	Heart of Algebra
18	C		■ ■ □	Passport to Advanced Math
19	D		■ ■ □	Analysis in History/ Social Studies

20	C			■ ■ □	Problem Solving and Data Analysis
21	B			■ ■ □	Passport to Advanced Math
22	C			■ ■ □	Analysis in History/ Social Studies Heart of Algebra
23	A			■ ■ □	N/A
24	D			■ ■ □	Analysis in History/ Social Studies Problem Solving and Data Analysis
25	B			■ ■ ■	Analysis in History/ Social Studies Heart of Algebra
26	C			■ ■ □	Problem Solving and Data Analysis
27	B			■ ■ □	Problem Solving and Data Analysis
28	A			■ ■ □	Analysis in Science Problem Solving and Data Analysis
29	D			■ ■ ■	Problem Solving and Data Analysis
30	A			■ ■ ■	Problem Solving and Data Analysis
31	9			■ ■ □	Problem Solving and Data Analysis
32	200			■ ■ □	Analysis in Science Heart of Algebra
33	3			■ ■ □	Problem Solving and Data Analysis
34	2			■ ■ ■	Passport to Advanced Math
35	.1, 1/10			■ ■ ■	Problem Solving and Data Analysis
36	160			■ ■ ■	N/A
37	30			■ ■ ■	Analysis in Science Heart of Algebra
38	528			■ ■ ■	Analysis in Science Passport to Advanced Math