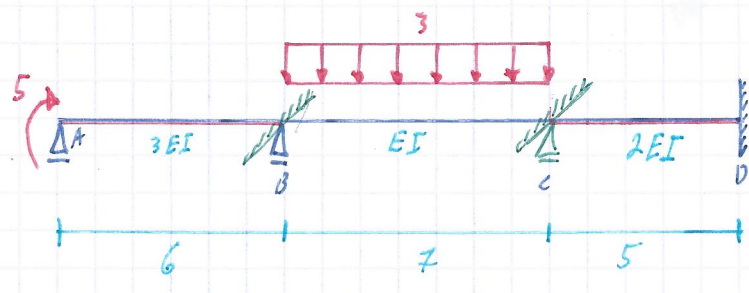


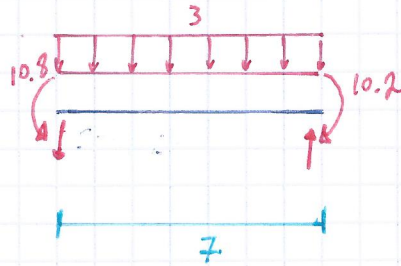
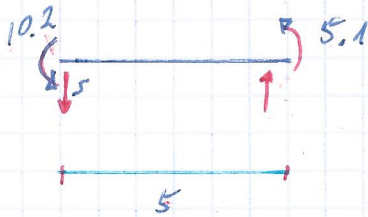
1)



2)

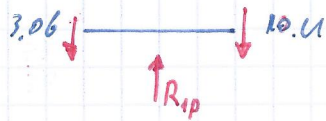
מס' ע"מ	A	B		C		D
מ"מ	m_{AB}	m_{BA}	m_{BC}	m_{CB}	m_{CD}	m_{DC}
$d = \frac{k}{EI}$	/	$-\frac{21}{29}$	$-\frac{8}{29}$	$-\frac{5}{19}$	$-\frac{14}{19}$	/
C		0.5 ←		→ 0.5	← 0.5 →	
M_R	-5	-2.5	12.25	-12.25	-	-
$\sum m_A$	/	-7.06	-2.69	3.22	9.03	-
הכוחות			1.61	-1.345	-	4.52
$\sum m_A$		-1.17	-0.44	0.35	0.99	-
הכוחות			0.175	-0.22		0.495
$\sum m_A$		-0.127	-0.048	0.058	0.16	
הכוחות			0.029	-0.024		0.08
$\sum m_A$		-0.021	-0.008	0.006	0.017	
הכוחות			0.003	-0.004		0.009
$\sum m_A$	-5	-10.8	10.8	-10.2	10.2	5.1

(mp)

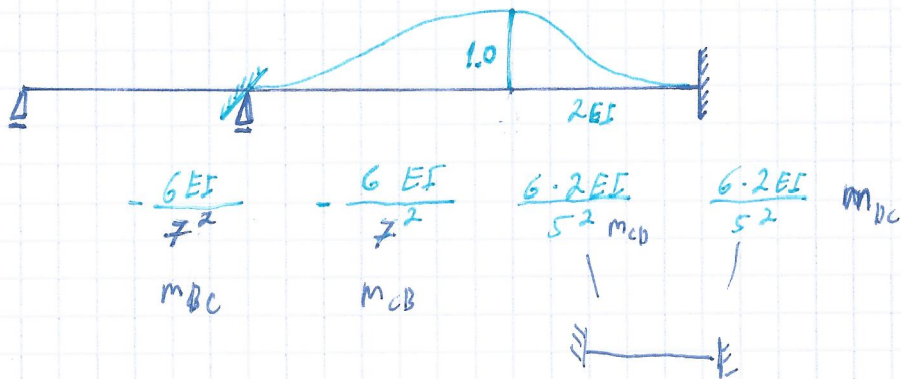


$$S = \frac{1}{5} (-10.2 - 5.1) = -3.06$$

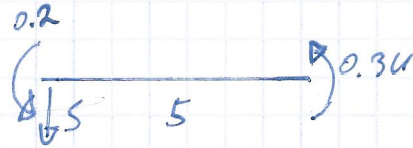
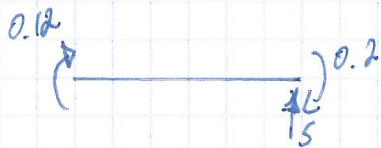
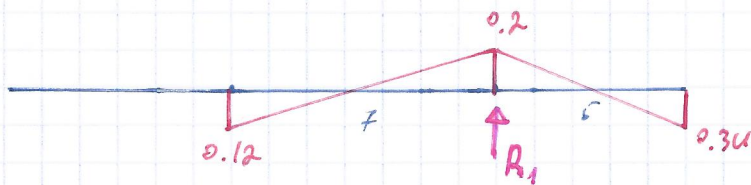
$$S_B^R = \frac{1}{7} \left(-10.8 + 10.2 + \frac{3 \cdot 7^2}{2} \right) = 10.4$$



$$R_{1p} = 3.06 + 10.4 = 13.46$$



نوع	A	B		C		D
عناصر	M_{AB}	M_{BA}	M_{BC}	M_{CB}	M_{CD}	M_{DC}
-d		$-\frac{21}{29}$	$-\frac{8}{29}$	$-\frac{5}{19}$	$-\frac{14}{19}$	
C		0.5 ← → 0.5		0.5 ← → 0.5		
M_R		$-\frac{6}{49}$	$-\frac{6}{49}$	0.48	0.48	
15%		0.08867	0.03378	-0.09409	-0.26306	
5%			-0.01704	0.01689		-0.13173
15%		0.03406	0.01297	-0.00444	-0.01244	
5%			-0.0022	0.00618		-0.00622
500		0.12	-0.12	-0.2	0.2	0.34



$$S = \frac{1}{7} (0.12 + 0.2) = 0.02$$

$$S = \frac{1}{5} (-0.34 - 0.2) = -0.108$$



$$R_1 = 0.128$$

$$R_p + R_1 \cdot D = 0$$

$$13.46 + 0.128 D = 0 \Rightarrow D = -105.15$$

$$m = m_p + m_1 \cdot D$$

