

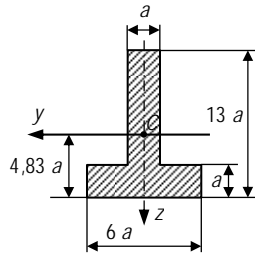
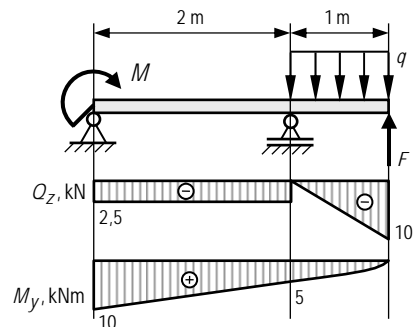
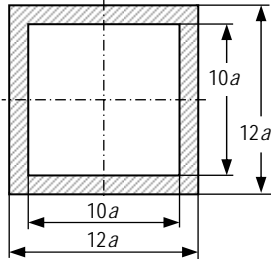
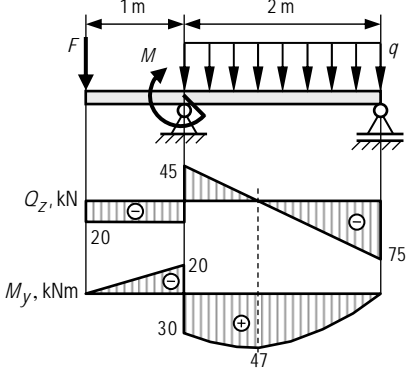
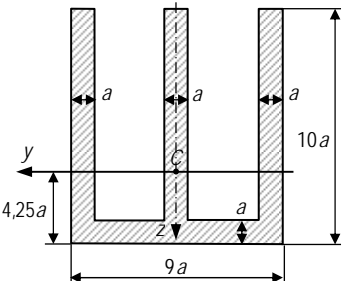
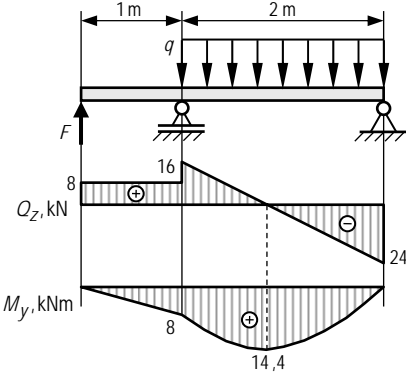
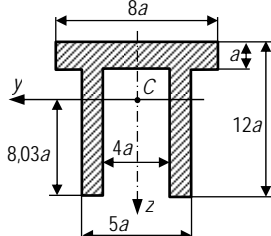
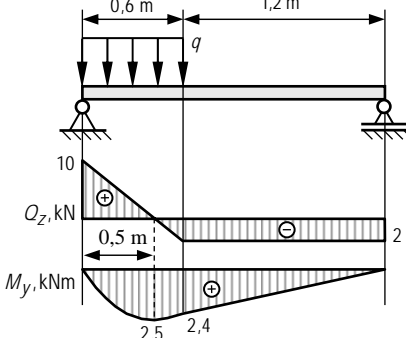
ДОМАШНА РАБОТА

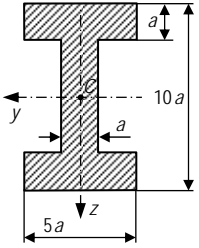
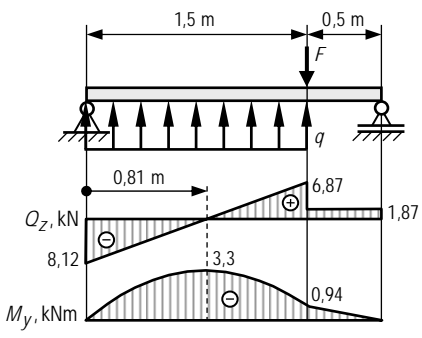
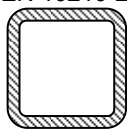
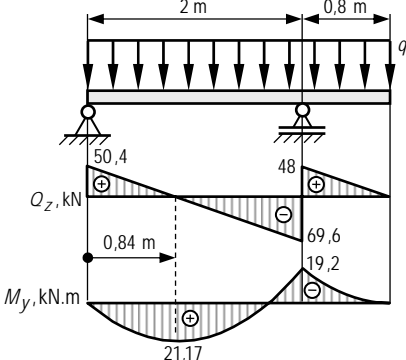
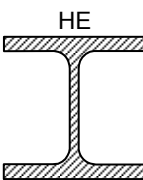
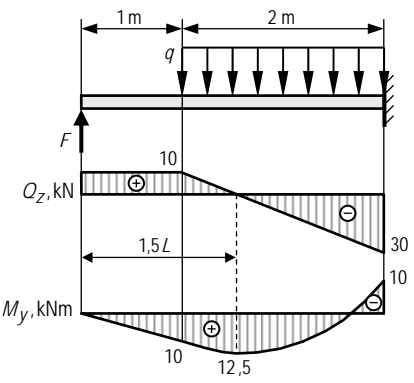

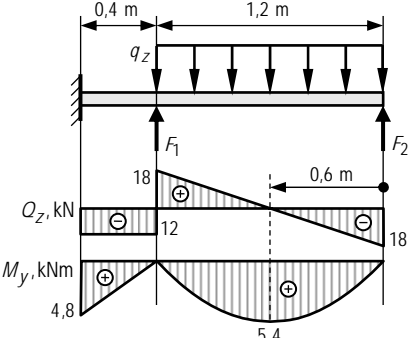
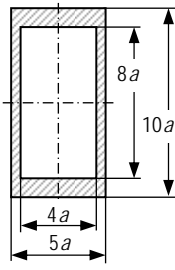
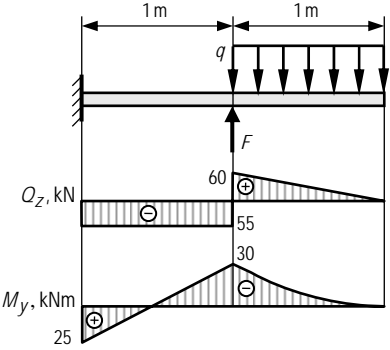
по „Съпротивление на материалите“ - II част

Задача № 1

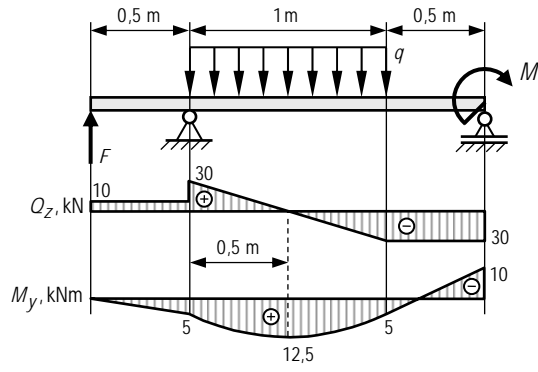
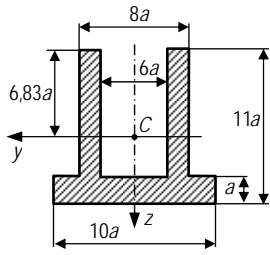
За показаните на схемата греди и напречно сечение:

1. Да се построят диаграмите на вътрешните усилия.
2. Да се извърши якостно оразмеряване, като се използва IV якостна теория.
3. Да се построят диаграмите на напреженията в застрашените сечения и се пресметнат максималните напрежения в тях.

1			<p style="text-align: center;"><u>Дадено е:</u></p> <p style="text-align: center;">$I_y = 313,5 a^4,$</p> <p style="text-align: center;">$\sigma_{\text{доп}} = 120 \text{ MPa}.$</p>
2			<p style="text-align: center;"><u>Дадено е:</u></p> <p style="text-align: center;">$I_y = 895 a^4,$</p> <p style="text-align: center;">$\sigma_{\text{доп}} = 110 \text{ MPa}.$</p>
3			<p style="text-align: center;"><u>Дадено е:</u></p> <p style="text-align: center;">$I_y = 352 a^4,$</p> <p style="text-align: center;">$\sigma_{\text{доп}} = 130 \text{ MPa}.$</p>
4			<p style="text-align: center;"><u>Дадено е:</u></p> <p style="text-align: center;">$I_y = 278,4 a^4,$</p> <p style="text-align: center;">$\sigma_{\text{доп}} = 115 \text{ MPa}.$</p>

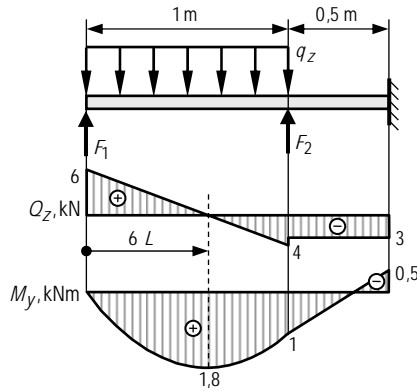
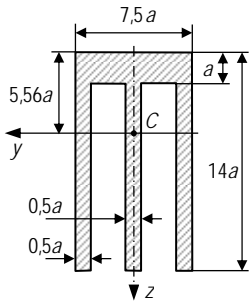
5			<p><u>Дадено е:</u> $I_y = 246 a^4$, $\sigma_{\text{доп}} = 125 \text{ MPa}$.</p>
6	<p>кух квадрат по БДС EN 10210-2:2006</p> 		<p><u>Дадено е:</u> $\sigma_{\text{доп}} = 140 \text{ MPa}$.</p>
7			<p><u>Дадено е:</u> $\sigma_{\text{доп}} = 120 \text{ MPa}$.</p>
8			<p><u>Дадено е:</u> $\sigma_{\text{доп}} = 95 \text{ MPa}$.</p>
9			<p><u>Дадено е:</u> $I_y = 246 a^4$, $\sigma_{\text{доп}} = 110 \text{ MPa}$.</p>

10



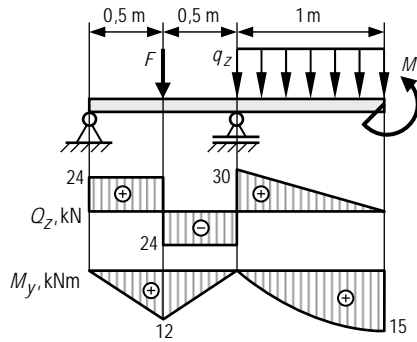
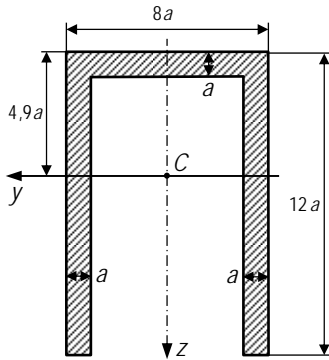
Дадено е:
 $I_y = 369,17 a^4$,
 $\sigma_{\text{доп}} = 135 \text{ MPa}$.

11



Дадено е:
 $I_y = 540,7 a^4$,
 $\sigma_{\text{доп}} = 85 \text{ MPa}$.

12



Дадено е:
 $I_y = 434 a^4$,
 $\sigma_{\text{доп}} = 115 \text{ MPa}$.