

1. Kontrolni iz Tehničke mehanike, grupa A

1. Preračunaj masu u silu, odnosno obratno:

a) 63kg; b) 15kN; c) 35dag; d) 800N

2. Nacrtaj sile:

$$F_1=70\text{N}; \alpha_1=135^\circ; \mu_F = \frac{10\text{N}}{1\text{cm}}; F_2=300\text{N}; \alpha_2=300^\circ; \mu_F = \frac{100\text{N}}{1\text{cm}};$$

3. Sastavi analitički i grafički kolinearne sile:

$$F_1=70\text{N}; F_2=-20\text{N}; F_3=-30\text{N}; F_4=40\text{N}; \mu_F = \frac{10\text{N}}{1\text{cm}}$$

4. Sastavi pomoću paralelograma sila konkurentne sile:

$$F_1=50\text{N}; F_2=30\text{N}; \alpha_1=60^\circ; \mu_F = \frac{10\text{N}}{1\text{cm}}$$

5. Sastavi zadane sile pomoću trokuta sila:

$$F_1=300\text{N}; \alpha_1=30^\circ; F_2=500\text{N}; \alpha_2=180^\circ; \mu_F = \frac{100\text{N}}{1\text{cm}}$$

1. Kontrolni iz Tehničke mehanike, grupa B

1. Preračunaj masu u silu, odnosno obratno:

a) 43N; b) 27kg; c) 1300N; d) 750dag

2. Nacrtaj sile:

$$F_1=1600\text{N}; \alpha_1=60^\circ; \mu_F = \frac{400\text{N}}{1\text{cm}}; F_2=45\text{N}; \alpha_2=225^\circ; \mu_F = \frac{10\text{N}}{1\text{cm}};$$

3. Sastavi analitički i grafički kolinearne sile:

$$F_1=-50\text{N}; F_2=30\text{N}; F_3=-40\text{N}; F_4=80\text{N}; \mu_F = \frac{10\text{N}}{1\text{cm}}$$

4. Sastavi pomoću paralelograma sila konkurentne sile:

$$F_1=400\text{N}; F_2=600\text{N}; \alpha_1=120^\circ; \mu_F = \frac{100\text{N}}{1\text{cm}}$$

5. Sastavi zadane sile pomoću trokuta sila:

$$F_1=35\text{N}; \alpha_1=90^\circ; F_2=40\text{N}; \alpha_2=330^\circ; \mu_F = \frac{10\text{N}}{1\text{cm}}$$