

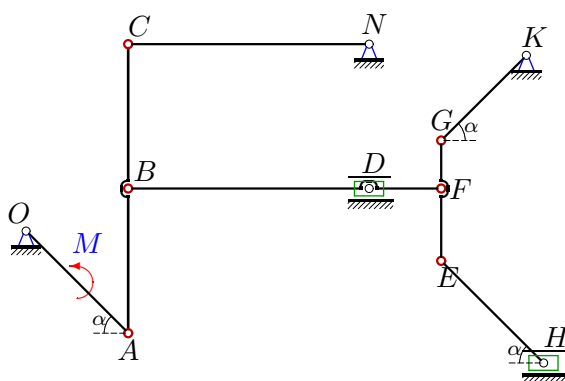
Условие равновесия механизма

Плоский многосвязный механизм с одной степенью свободы находится в равновесии. К кривошипу OA приложен момент M . Размеры даны в сантиметрах. Дан ряд p распределения дискретной случайной величины силы сопротивления в ползунах $T_i, i = 1, \dots, 4$. Найти математическое ожидание момента M .

Кирсанов М.Н. **Решебник. Теоретическая механика**/Под ред. А. И. Кириллова.– М.: ФИЗМАТЛИТ, 2008. — 384 с. (с.158.)

Задача L-27.1.

Агеев Евгений



$$\alpha = 45^\circ,$$

$$AB = 30, BC = 30,$$

$$DB = 50, DF = 15,$$

$$NC = 50, EH = 30,$$

$$FE = 15, FG = 10,$$

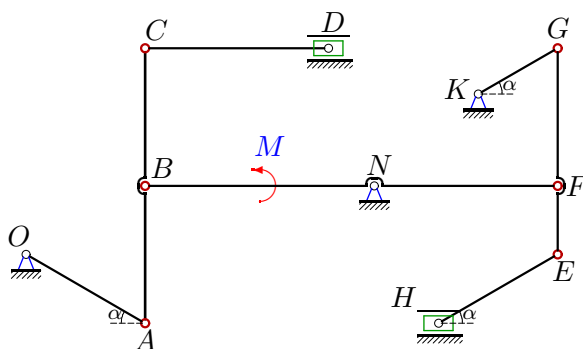
$$OA = 30, KG = 25.$$

$$p = [0.1, 0.3, 0.4, 0.2],$$

$$T = [8, 7, 6, 5] \text{ Н.}$$

Задача L-27.2.

Бобровский Руслан



$$\alpha = 30^\circ,$$

$$AB = 30, BC = 30,$$

$$NB = 50, NF = 40,$$

$$CD = 40, EH = 30,$$

$$FE = 15, FG = 30,$$

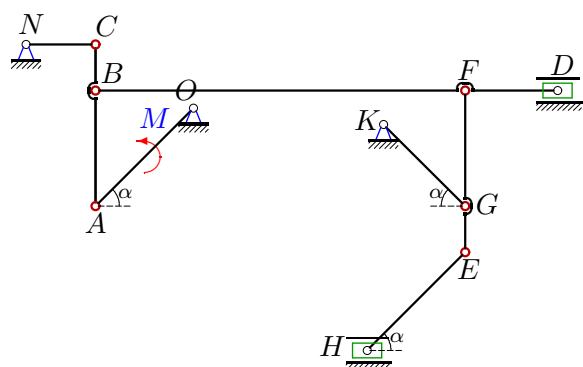
$$OA = 30, KG = 20.$$

$$p = [0.1, 0.3, 0.35, 0.25],$$

$$T = [8.5, 7.5, 6.5, 5.5] \text{ Н.}$$

Задача L-27.3.

Диб Делшан



$$\alpha = 45^\circ,$$

$$AB = 25, BC = 10,$$

$$BF = 80, FD = 20,$$

$$NC = 15, EH = 30,$$

$$FE = 35, FG = 25,$$

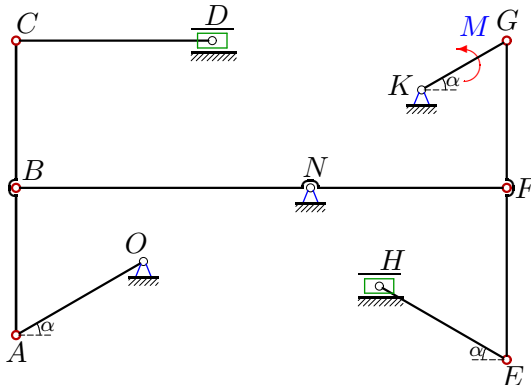
$$OA = 30, KG = 25.$$

$$p = [0.1, 0.3, 0.4, 0.2],$$

$$T = [8, 7.5, 6.5, 5.5] \text{ Н.}$$

Задача L-27.4.

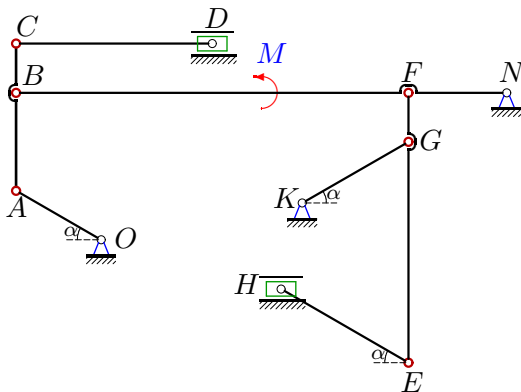
Ерзунов Илья



$\alpha = 30^\circ$,
 $AB = 30, BC = 30,$
 $NB = 60, NF = 40,$
 $CD = 40, EH = 30,$
 $FE = 35, FG = 30,$
 $OA = 30, KG = 20.$
 $p = [0.05, 0.35, 0.4, 0.2],$
 $T = [8, 7.5, 6.5, 5] \text{ Н.}$

Задача L-27.5.

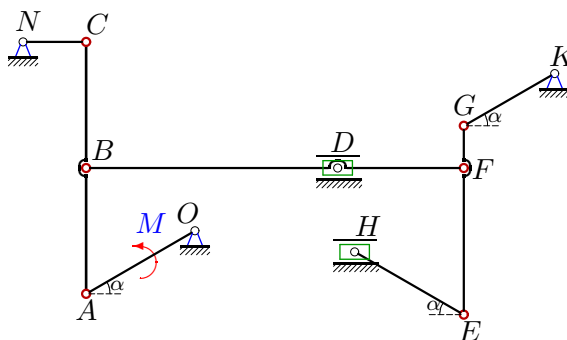
Максимов Дмитрий



$\alpha = 30^\circ$,
 $AB = 20, BC = 10,$
 $BF = 80, NF = 20,$
 $CD = 40, EH = 30,$
 $FG = 10, GE = 45,$
 $OA = 20, KG = 25.$
 $p = [0.05, 0.35, 0.4, 0.2],$
 $T = [8, 7, 6.5, 5.5] \text{ Н.}$

Задача L-27.6.

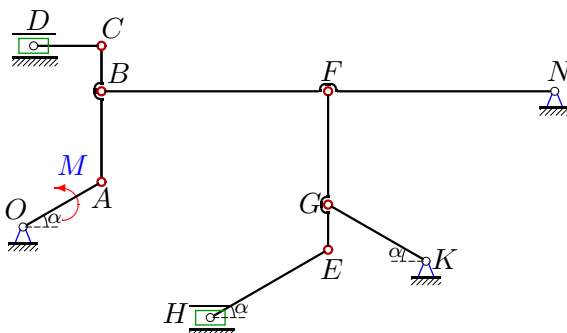
Ниналалов Ибрагим



$\alpha = 30^\circ$,
 $AB = 30, BC = 30,$
 $DB = 60, DF = 30,$
 $NC = 15, EH = 30,$
 $FE = 35, FG = 10,$
 $OA = 30, KG = 25.$
 $p = [0.05, 0.35, 0.4, 0.2],$
 $T = [8, 7.5, 6, 5] \text{ Н.}$

Задача L-27.7.

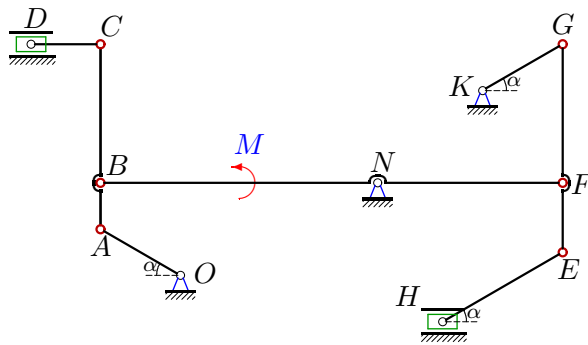
Огоньков Степан



$\alpha = 30^\circ$,
 $AB = 20, BC = 10,$
 $BF = 50, NF = 50,$
 $CD = 15, EH = 30,$
 $FG = 25, GE = 10,$
 $OA = 20, KG = 25.$
 $p = [0.05, 0.35, 0.4, 0.2],$
 $T = [8, 7.5, 6, 5.5] \text{ Н.}$

Задача L-27.8.

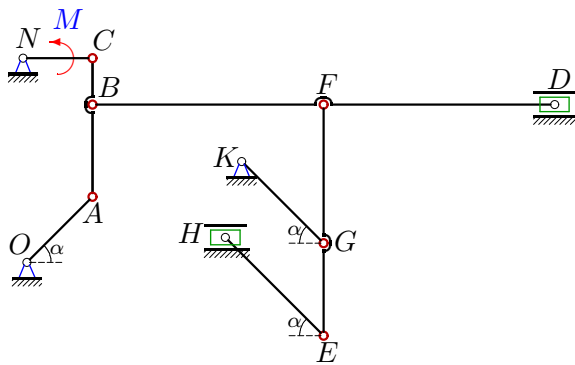
Погрев Василий



$\alpha = 30^\circ$,
 $AB = 10, BC = 30,$
 $NB = 60, NF = 40,$
 $CD = 15, EH = 30,$
 $FE = 15, FG = 30,$
 $OA = 20, KG = 20.$
 $p = [0.05, 0.35, 0.4, 0.2],$
 $T = [8, 7, 6.5, 5] \text{ Н.}$

Задача L-27.9.

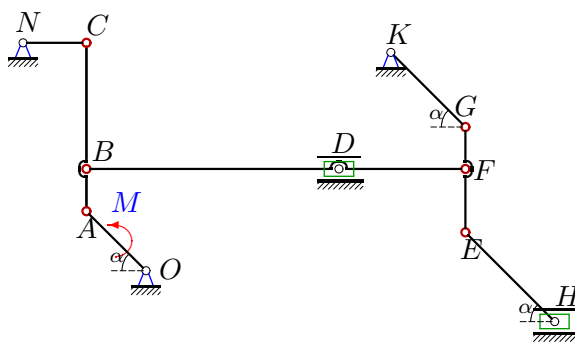
Сметанин Денис



$\alpha = 45^\circ$,
 $AB = 20, BC = 10,$
 $BF = 50, FD = 50,$
 $NC = 15, EH = 30,$
 $FE = 50, FG = 30,$
 $OA = 20, KG = 25.$
 $p = [0.05, 0.35, 0.4, 0.2],$
 $T = [8, 7, 6.5, 5] \text{ Н.}$

Задача L-27.10.

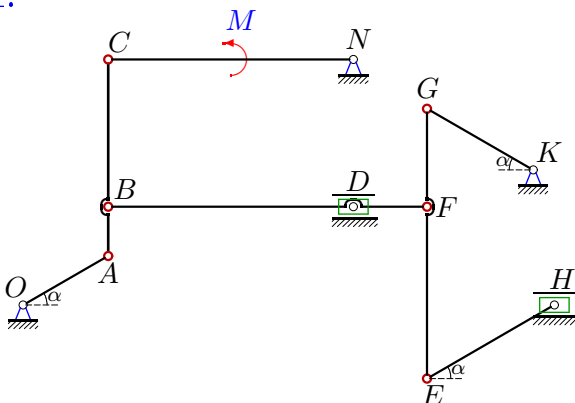
Трунов Павел



$\alpha = 45^\circ$,
 $AB = 10, BC = 30,$
 $DB = 60, DF = 30,$
 $NC = 15, EH = 30,$
 $FE = 15, FG = 10,$
 $OA = 20, KG = 25.$
 $p = [0.1, 0.3, 0.4, 0.2],$
 $T = [8, 7.5, 6, 5] \text{ Н.}$

Задача L-27.11.

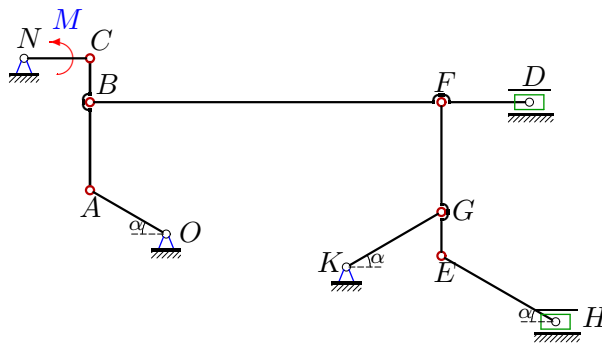
Михайлов Антон



$\alpha = 30^\circ$,
 $AB = 10, BC = 30,$
 $DB = 50, DF = 15,$
 $NC = 50, EH = 30,$
 $FE = 35, FG = 20,$
 $OA = 20, KG = 25.$
 $p = [0.1, 0.3, 0.4, 0.2],$
 $T = [8, 7, 6.5, 5.5] \text{ Н.}$

Задача L-27.12.

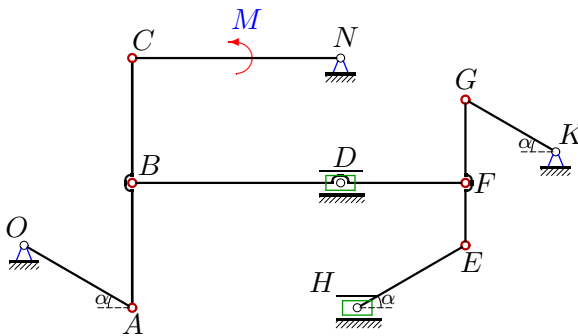
Яцков Владимир



$\alpha = 30^\circ$,
 $AB = 20, BC = 10,$
 $BF = 80, FD = 20,$
 $NC = 15, EH = 30,$
 $FE = 35, FG = 25,$
 $OA = 20, KG = 25.$
 $p = [0.1, 0.3, 0.35, 0.25],$
 $T = [8.5, 7.5, 6.5, 5] \text{ Н.}$

Задача L-27.13.

Батсайхан Хангай



$\alpha = 30^\circ$,
 $AB = 30, BC = 30,$
 $DB = 50, DF = 30,$
 $NC = 50, EH = 30,$
 $FE = 15, FG = 20,$
 $OA = 30, KG = 25.$
 $p = [0.1, 0.3, 0.35, 0.25],$
 $T = [8.5, 7, 6, 5.5] \text{ Н.}$