

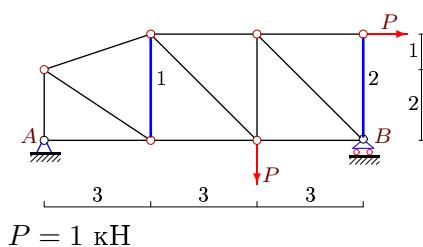
# Расчет фермы

К плоской ферме приложены две одинаковые силы  $P$ . Найти усилия в стержнях 1 и 2 (выделены утолщением). Размеры даны в метрах.

Кирсанов М.Н. Задачи по теоретической механике с решениями в Maple 11. – М.: ФИЗМАТЛИТ, 2010. – 264 с. (c.44)

Кирсанов М.Н. Теоретическая механика. Сборник задач – М.: Инфра-М, 2014. – 430 с. ISBN 978-5-16-010026-5 (c.89)

## Задача S-27.1.

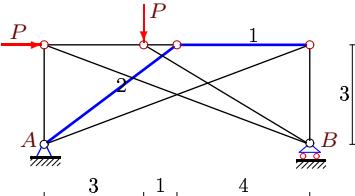


$$P = 1 \text{ кН}$$

9

## Задача S-27.2.

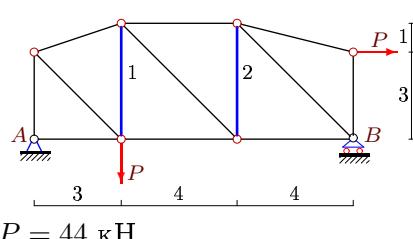
## Задача S-27.2.



$$P = 4 \text{ кН}$$

9

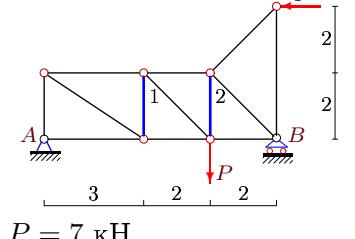
## Задача S-27.3.



$$P = 44 \text{ кН}$$

9

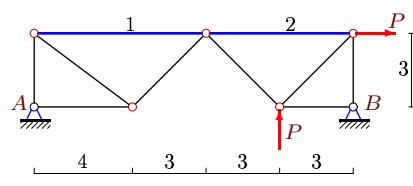
## Задача S-27.4.



$$P = 7 \text{ кН}$$

9

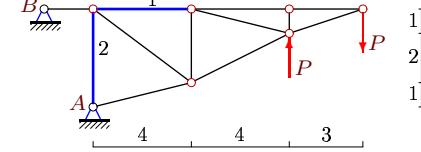
## Задача S-27.5.



$$P = 13 \text{ кН}$$

9

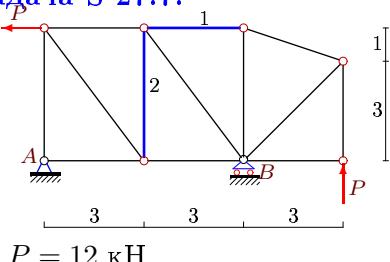
## Задача S-27.6.



$$P = 16 \text{ кН}$$

9

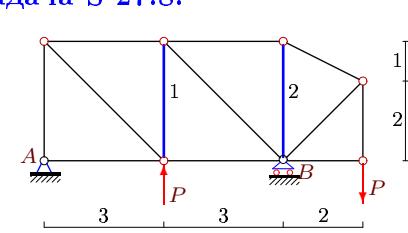
## Задача S-27.7.



$$P = 12 \text{ кН}$$

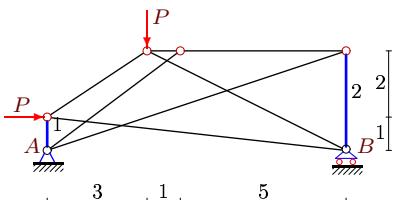
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## Задача S-27.8.

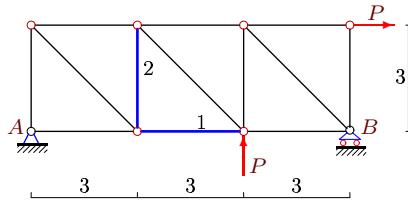


$$P = 6 \text{ кН}$$

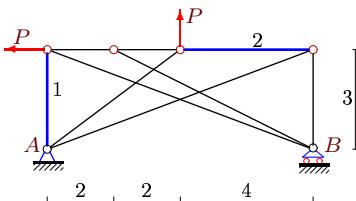
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**Задача S-27.9.**

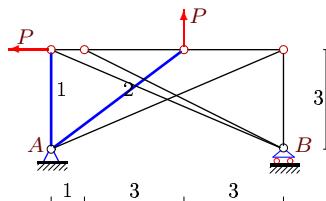
$$P = 9 \text{ кН}$$

**Задача S-27.10.**

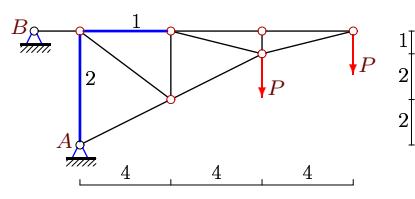
$$P = 3 \text{ кН}$$

**Задача S-27.11.**

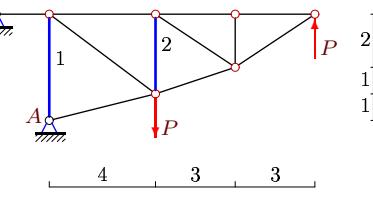
$$P = 24 \text{ кН}$$

**Задача S-27.12.**

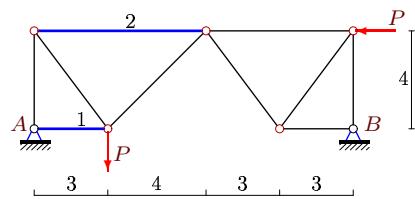
$$P = 3 \text{ кН}$$

**Задача S-27.13.**

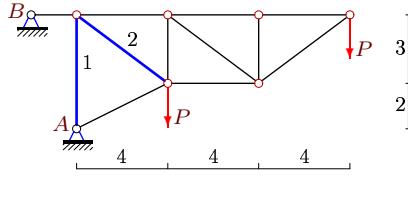
$$P = 1 \text{ кН}$$

**Задача S-27.14.**

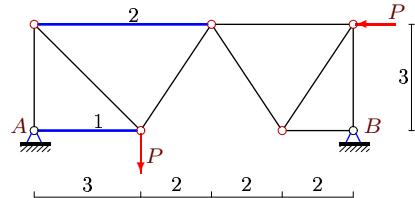
$$P = 24 \text{ кН}$$

**Задача S-27.15.**

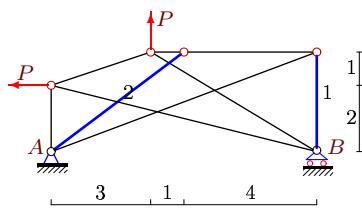
$$P = 26 \text{ кН}$$

**Задача S-27.16.**

$$P = 15 \text{ кН}$$

**Задача S-27.17.**

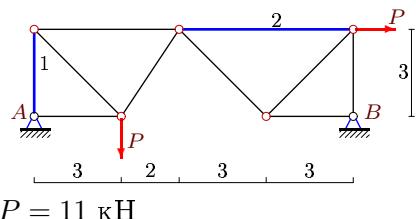
$$P = 1 \text{ кН}$$

**Задача S-27.18.**

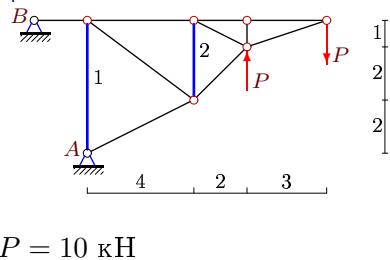
$$P = 8 \text{ кН}$$

**Задача S-27.19.**

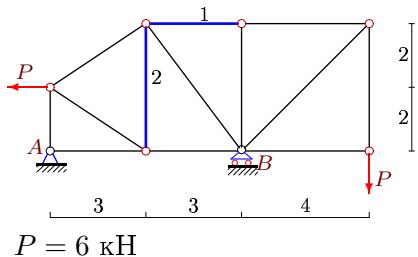
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**Задача S-27.21.**

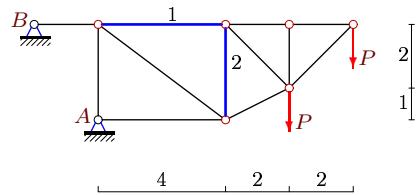
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**Задача S-27.23.**

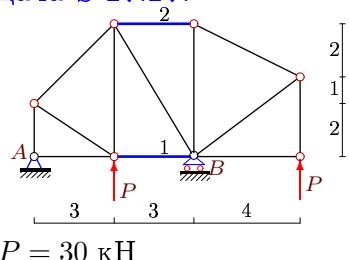
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**Задача S-27.25.**

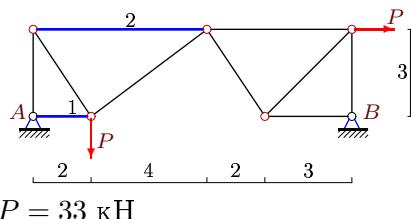
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**Задача S-27.27.**

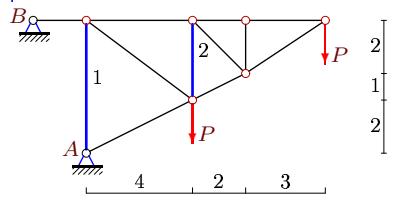
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**Задача S-27.20.**

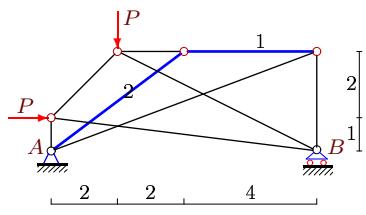
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**Задача S-27.22.**

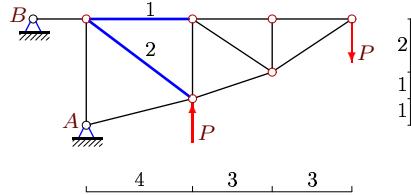
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**Задача S-27.24.**

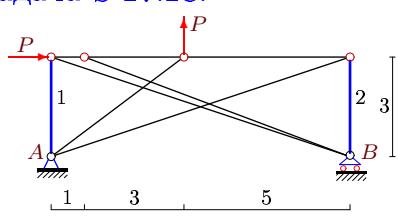
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**Задача S-27.26.**

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**Задача S-27.28.**

9



S-27

**Ответы.****Расчет фермы**

13.02.2015

Nº	$X_A$	$Y_A$	$X_B$	$Y_B$	$S_1$	$S_2$
1	-1	0	-	1	0	0
2	-4	1	-	3	-4	0
3	-44	20	-	24	29	24
4	7	6	-	1	-6	1
5	-14	-6	1	-7	8	20
6	12	0	-12	-	16	3
7	12	14	-	-26	-9	-14
8	0	-5	-	5	-1	-2
9	-9	5	-	4	-8	-3
10	-3	-2	-	-1	1	2
11	24	-3	-	-21	0	56
12	3	0	-	-3	0	5
13	4	2	-4	-	4	0
14	-36	0	36	-	-9	8
15	23	28	3	-2	-23	-21
16	48	30	-48	-	-6	10
17	1	1	0	0	-1	-1
18	8	-3	-	-5	3	0
19	1	5	-12	6	-5	5
20	-8	18	-25	15	8	-12
21	6	0	-6	-	3	10
22	78	60	-78	-	-21	-5
23	6	-2	-	8	6	-1
24	-8	5	-	3	-8	0
25	14	6	-14	-	6	-3
26	12	0	-12	-	16	-5
27	0	5	-	-65	3	-24
28	-9	-8	-	-1	0	1

S-27 файл o27s9A