

# Плоское напряженное состояние

Найти деформации пластинки. Дано:  $E = 1000$  МПа,  $\nu = 0.3$ .

**Задача 8.1**  
 $BF = 4$  см,  $BD = 3$  см.

8.1

**Задача 8.2**  
 $BF = 4$  см,  $BD = 3$  см.

8.1

**Задача 8.3**  
 $BF = 8$  см,  $BD = 6$  см.

8.1

**Задача 8.4**  
 $BF = 8$  см,  $BD = 6$  см.

8.1

**Задача 8.5**  
 $BF = 3$  см,  $BD = 3$  см.

8.1

**Задача 8.6**  
 $BF = 4$  см,  $BD = 3$  см.

8.1

**Задача 8.7**  
 $BF = 4$  см,  $BD = 3$  см.

8.1

**Задача 8.8**  
 $BF = 4$  см,  $BD = 3$  см.

8.1

**Задача 8.9**  
 $BF = 4$  см,  $BD = 3$  см.

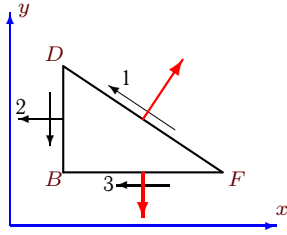
8.1

**Задача 8.10**  
 $BF = 8$  см,  $BD = 6$  см.

8.1

**Задача 8.11**

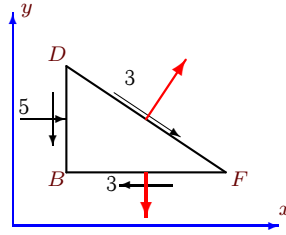
$BF = 4$  см,  $BD = 3$  см.



8.1

**Задача 8.12**

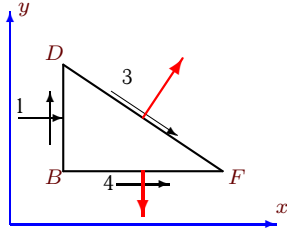
$BF = 4$  см,  $BD = 3$  см.



8.1

**Задача 8.13**

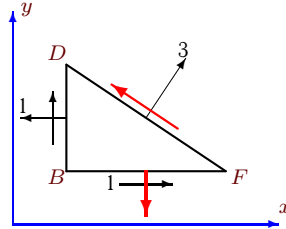
$BF = 4$  см,  $BD = 3$  см.



8.1

**Задача 8.14**

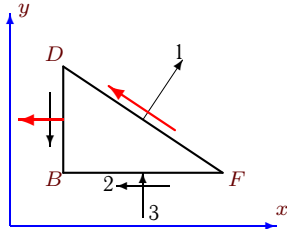
$BF = 4$  см,  $BD = 3$  см.



8.1

**Задача 8.15**

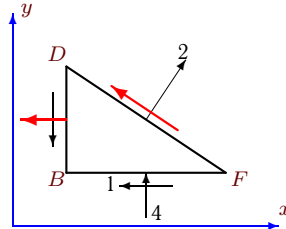
$BF = 4$  см,  $BD = 3$  см.



8.1

**Задача 8.16**

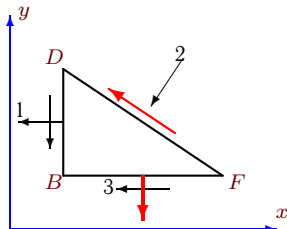
$BF = 8$  см,  $BD = 6$  см.



8.1

**Задача 8.17**

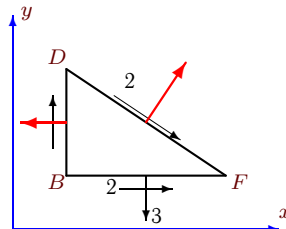
$BF = 4$  см,  $BD = 3$  см.



8.1

**Задача 8.18**

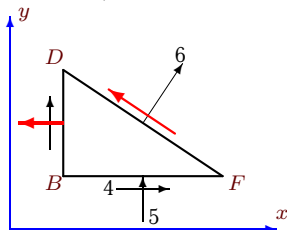
$BF = 4$  см,  $BD = 3$  см.



8.1

**Задача 8.19**

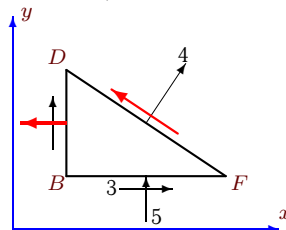
$BF = 4$  см,  $BD = 2$  см.



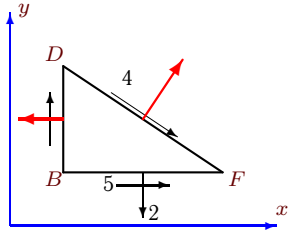
8.1

**Задача 8.20**

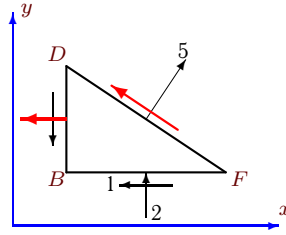
$BF = 4$  см,  $BD = 3$  см.



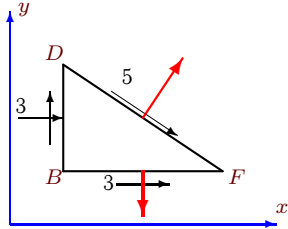
8.1

**Задача 8.21** $BF = 8 \text{ см}, BD = 6 \text{ см}.$ 

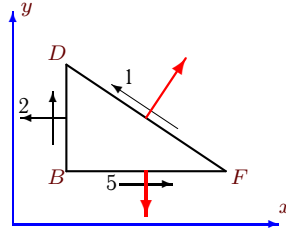
8.1

**Задача 8.22** $BF = 4 \text{ см}, BD = 2 \text{ см}.$ 

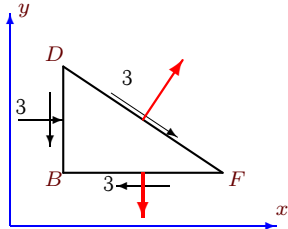
8.1

**Задача 8.23** $BF = 8 \text{ см}, BD = 6 \text{ см}.$ 

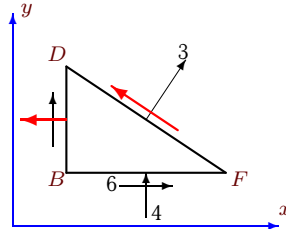
8.1

**Задача 8.24** $BF = 4 \text{ см}, BD = 3 \text{ см}.$ 

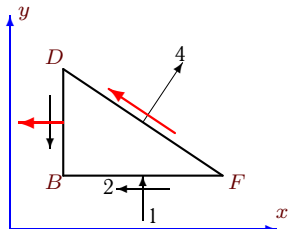
8.1

**Задача 8.25** $BF = 4 \text{ см}, BD = 3 \text{ см}.$ 

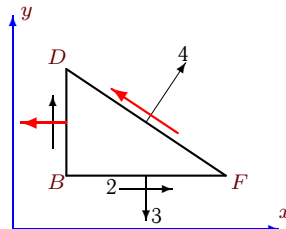
8.1

**Задача 8.26** $BF = 4 \text{ см}, BD = 3 \text{ см}.$ 

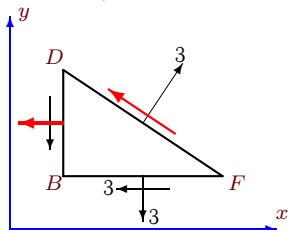
8.1

**Задача 8.27** $BF = 4 \text{ см}, BD = 3 \text{ см}.$ 

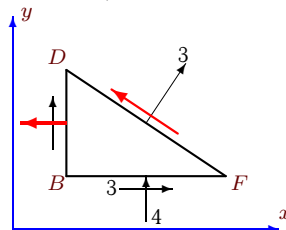
8.1

**Задача 8.28** $BF = 4 \text{ см}, BD = 3 \text{ см}.$ 

8.1

**Задача 8.29** $BF = 3 \text{ см}, BD = 3 \text{ см}.$ 

8.1

**Задача 8.30** $BF = 4 \text{ см}, BD = 3 \text{ см}.$ 

8.1

### Плоское напряженное состояние

	$\sigma_x$	$\sigma_y$	$\sigma$	$\tau_{xy}$	$\tau$	$\sigma_{max}$	$\sigma_{min}$	$\varepsilon_x \cdot 10^4$	$\varepsilon_y \cdot 10^4$
1	1.000	5.813	6.000	2.000	1.750	6.535	0.277	64.519	-16.832
2	13.250	-1.000	1.250	-3.000	-6.000	13.856	-1.606	143.376	-57.626
3	2.000	5.333	-0.667	-5.000	3.000	8.937	-1.604	94.183	-42.849
4	-5.000	-28.750	-25.000	-5.000	-10.000	-3.990	-29.760	49.376	-285.626
5	-7.000	15.000	2.000	-2.000	11.000	15.180	-7.180	173.344	-117.344
6	5.667	-3.000	3.000	3.000	-5.000	6.604	-3.937	77.849	-59.183
7	-11.000	23.000	5.000	-6.000	18.000	24.028	-12.028	276.361	-192.361
8	-3.000	-16.667	-13.667	-2.000	-6.000	-2.713	-16.953	23.727	-161.393
9	2.000	-7.750	-10.000	-6.000	-3.000	4.856	-10.606	80.376	-120.626
10	3.500	2.000	3.500	1.000	-1.000	4.000	1.500	35.500	3.000
11	2.000	5.833	7.333	3.000	1.000	7.477	0.357	73.697	-18.863
12	-5.000	-9.500	-5.000	3.000	-3.000	-3.500	-11.000	-2.000	-99.500
13	-1.000	-9.583	-10.333	-4.000	-3.000	0.575	-11.158	39.226	-113.309
14	1.000	5.625	3.000	-1.000	2.500	5.832	0.793	55.940	-9.565
15	2.778	-3.000	1.000	2.000	-3.333	3.403	-3.625	44.900	-46.455
16	10.000	-4.000	2.000	1.000	-7.000	10.071	-4.071	112.924	-70.924
17	1.000	-8.187	-2.000	3.000	-5.250	1.893	-9.080	46.169	-96.482
18	8.333	3.000	3.000	-2.000	-2.000	9.000	2.333	83.000	-3.667
19	66.000	-5.000	6.000	-4.000	-26.000	66.225	-5.225	677.920	-250.920
20	28.000	-5.000	4.000	-3.000	-15.000	28.271	-5.271	298.517	-137.517
21	13.250	2.000	1.250	-5.000	-4.000	15.151	0.099	151.213	-44.463
22	29.000	-2.000	5.000	1.000	-13.000	29.032	-2.032	296.419	-107.419
23	-3.000	-15.167	-13.667	-3.000	-5.000	-2.300	-15.866	24.594	-151.760
24	2.000	1.167	-3.333	-5.000	1.000	6.601	-3.434	76.309	-54.142
25	-3.000	-7.500	-3.000	3.000	-3.000	-1.500	-9.000	12.000	-85.500
26	31.444	-4.000	3.000	-6.000	-15.333	32.433	-4.988	339.290	-147.179
27	7.556	-1.000	4.000	2.000	-4.667	8.000	-1.444	84.333	-38.444
28	11.111	3.000	4.000	-2.000	-3.333	11.577	2.534	108.174	-9.396
29	-3.000	3.000	3.000	3.000	3.000	4.243	-4.243	55.154	-55.154
30	23.444	-4.000	3.000	-3.000	-12.333	23.769	-4.324	250.658	-114.547