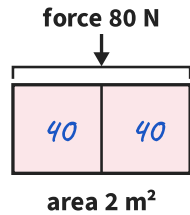


Pressure

ANSWERS

1

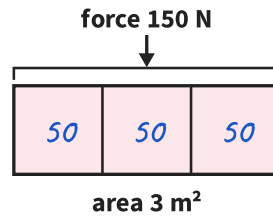
A crate pushes down with 80 N on an area of 2 m². Find the pressure.



$$80 \div 2 = 40 \text{ N/m}^2$$

2

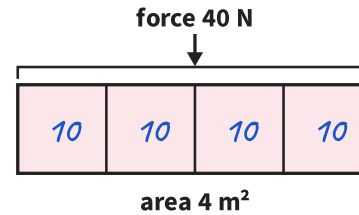
A water tank pushes down with 150 N on an area of 3 m². Find the pressure.



$$150 \div 3 = 50 \text{ N/m}^2$$

3

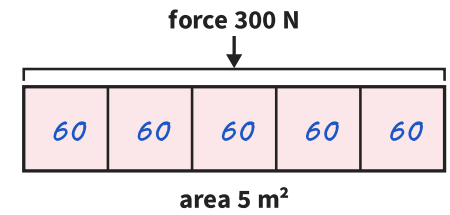
A cupboard pushes down with 40 N on an area of 4 m². Find the pressure.



$$40 \div 4 = 10 \text{ N/m}^2$$

4

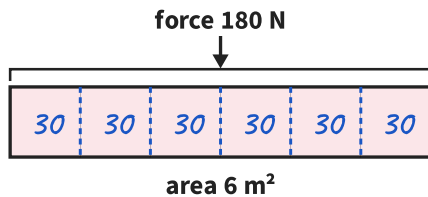
A shed pushes down with 300 N on an area of 5 m². Find the pressure.



$$300 \div 5 = 60 \text{ N/m}^2$$

5

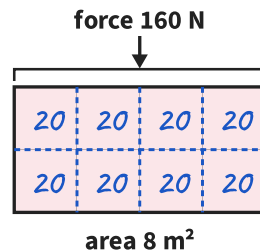
A hot tub pushes down with 180 N on an area of 6 m². Find the pressure.



$$180 \div 6 = 30 \text{ N/m}^2$$

6

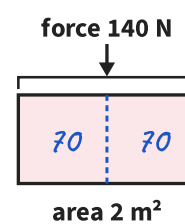
A stage pushes down with 160 N on an area of 8 m². Find the pressure.



$$160 \div 8 = 20 \text{ N/m}^2$$

7

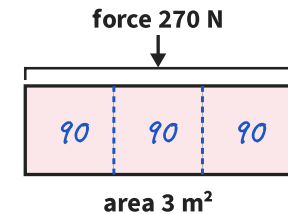
A statue stands on an area of 2 m². It pushes down with 140 N. Find the pressure.



$$140 \div 2 = 70 \text{ N/m}^2$$

8

A box weighs 270 N. It stands on an area of 3 m². Find the pressure.

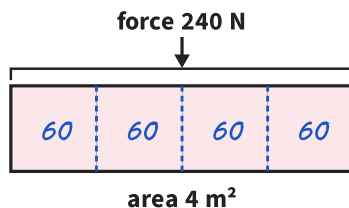


$$270 \div 3 = 90 \text{ N/m}^2$$

9



A piano pushes down with 240 N on an area of 4 m². Find the pressure.

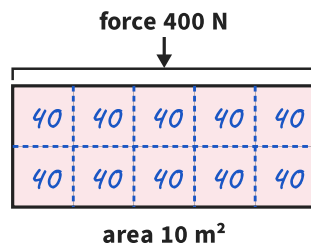


$$240 \div 4 = 60 \text{ N/m}^2$$

10



A caravan pushes down with 400 N on an area of 10 m². Find the pressure.

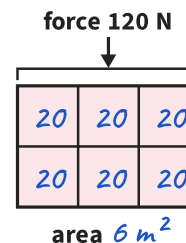


$$400 \div 10 = 40 \text{ N/m}^2$$

11



A crate pushes down with 120 N. Each square of its base is 1 m². Find the pressure.

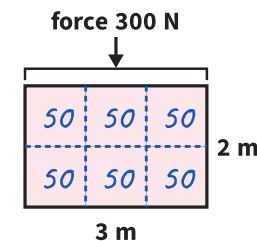


$$120 \div 6 = 20 \text{ N/m}^2$$

12



A trampoline pushes down with 300 N. Its base is 2 m by 3 m. Find the pressure.



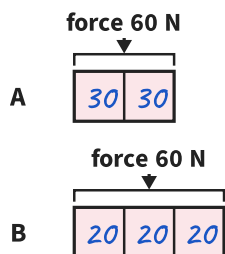
$$300 \div 6 = 50 \text{ N/m}^2$$

13



Box A pushes down with 60 N on 2 m². Box B pushes down with 60 N on 3 m².

Which gives more pressure?

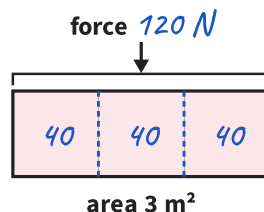


Answer Box A

14



A box that weighs 50 N sits on a box that weighs 70 N. They stand on an area of 3 m². Find the pressure.



$$50 + 70 = 120$$

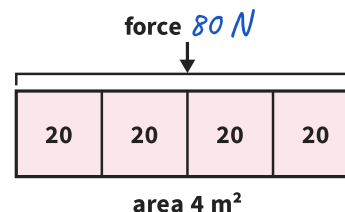
$$120 \div 3 = 40$$

Answer 40 N/m²

15



A rug has 20 N on each square metre. Its area is 4 m². What is the force on the rug?



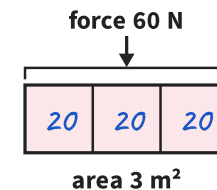
$$20 \times 4 = 80$$

Answer 80 N

16



Sam says 60 N on an area of 3 m² gives a pressure of 180 N/m². What has Sam done wrong?



Sam is wrong because he multiplied 60 by 3.

$$\text{He must divide: } 60 \div 3 = 20$$

Right answer 20 N/m²