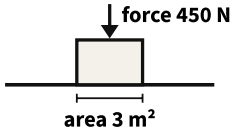
Pressure

1

A trunk pushes down with 450 N on an area of 3 m^2. Find the pressure.



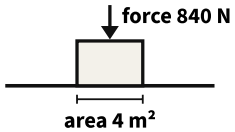
Area (m^2)	1	× 3 →	3
Force (N)			450

pressure is the force on 1 m^2

Answer _____

2

A cabinet pushes down with 840 N on an area of 4 m^2. Find the pressure.

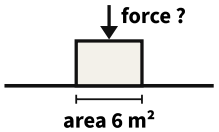


Area (m^2)	1	× 4 →	4
Force (N)			840

Answer _____

3

A greenhouse puts a pressure of 90 N/m^2 on an area of 6 m^2. Find the force.

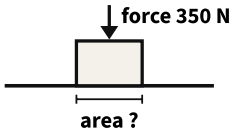


Area (m^2)	1	× →	6
Force (N)	90		

Answer _____

4

A hay bale pushes down with 350 N.
The pressure is 70 N/m^2. Find the area.

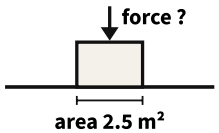


Area (m^2)	1	× →	
Force (N)	70		350

Answer _____

5

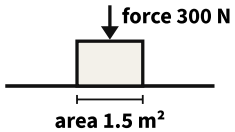
A paddling pool puts a pressure of 400 N/m^2 on an area of 2.5 m^2.
Find the force.



Answer _____

6

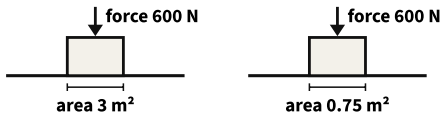
A box pushes down with 300 N on an area of 1.5 m^2. Kai works out 1.5 ÷ 300 and says the pressure is 0.005 N/m^2.
Explain Kai's mistake, then find the pressure.



Answer _____

7

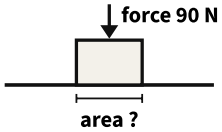
A block pushes down with 600 N.
Face P has an area of 3 m^2 and face Q has an area of 0.75 m^2. Which face gives the greater pressure when the block rests on it?



Answer _____

8

A floor mat pushes down with 90 N.
The pressure is 60 N/m^2. Find its area.

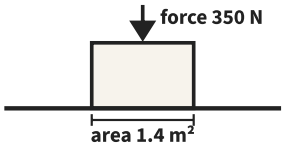


Answer _____

Pressure *further practice*

9

A dog kennel pushes down with 350 N on an area of 1.4 m^2. Find the pressure.



Answer _____

10

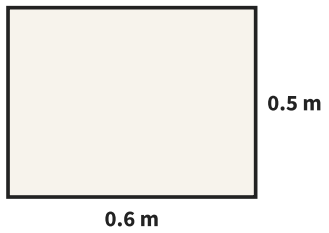
Complete the table.

	Force (N)	Area (m^2)	Pressure (N/m^2)
Lamp	24	0.2	
Crate		2.5	160
Desk	450		300

_____

11

A fridge pushes down with 900 N.
Its base is this rectangle.
Find the pressure under the fridge.



Answer _____

12

Box X pushes down with 500 N on an area of 2 m^2. Box Y pushes down with 360 N on an area of 1.2 m^2. Which box puts the greater pressure on the floor?

Answer _____

13

A chair pushes down with 240 N.
It stands on 4 legs, and each leg touches the floor on an area of 0.01 m^2.
Find the pressure on the floor.

Answer _____

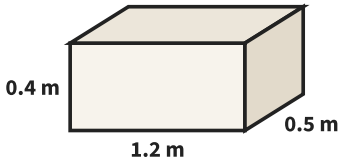
14

A lawn can take a pressure of up to 2000 N/m^2 without marking.
A garden roller pushes down with 700 N.
What is the smallest area the roller can rest on?

Answer _____

15

This block pushes down with 720 N.
It can rest on any of its faces.
Find the smallest pressure it can put on the ground.



Answer _____

16

Stool A pushes down with 300 N on an area of 0.25 m^2. Stool B pushes down with 480 N on an area of 0.4 m^2.
Ella says stool B puts more pressure on the floor because it pushes down harder.
Is she right? Explain.

Answer _____