

1. The formula for pressure is $P = \frac{F}{A}$. Calculate the pressure, giving your answers as decimals to 2 d.p.:

a) 1N over 1m^2 $1\text{N}/\text{m}^2$

b) 2N over 1cm^2 $2\text{N}/\text{cm}^2$

c) 10N over 20m^2 $0.5\text{N}/\text{m}^2$

d) 2N over 5cm^2 $0.4\text{N}/\text{cm}^2$

e) 10N over 15m^2 $0.67\text{N}/\text{m}^2$

f) 2N over 15cm^2 $0.13\text{N}/\text{cm}^2$

g) 5N over 1m^2 $5\text{N}/\text{m}^2$

h) 20N over 10cm^2 $2\text{N}/\text{cm}^2$

i) 100N over 20m^2 $5\text{N}/\text{m}^2$

j) 2N over 50cm^2 $0.04\text{N}/\text{cm}^2$

k) 100N over 15m^2 $6.67\text{N}/\text{m}^2$

l) 4N over 35cm^2 $0.11\text{N}/\text{cm}^2$

2. The formula for pressure is $P = \frac{F}{A}$. Calculate the force, giving your answers as decimals to 2 d.p.:

a) $1\text{N}/\text{m}^2$ over 1m^2 1N

b) $2\text{N}/\text{cm}^2$ over 1cm^2 2N

c) $10\text{N}/\text{m}^2$ over 20m^2 200N

d) $2\text{N}/\text{cm}^2$ over 5cm^2 10N

e) $0.1\text{N}/\text{m}^2$ over 15m^2 1.5N

f) $2.34\text{N}/\text{cm}^2$ over 15cm^2 35.1N

g) $10\text{N}/\text{m}^2$ over 1m^2 10N

h) $200\text{N}/\text{cm}^2$ over 1cm^2 200N

i) $10\text{N}/\text{m}^2$ over 10m^2 100N

j) $20\text{N}/\text{cm}^2$ over 5cm^2 100N

k) $0.1\text{N}/\text{m}^2$ over 0.15m^2 0.02N

l) $2.34\text{N}/\text{cm}^2$ over 1.1cm^2 2.57N

3. The formula for pressure is $P = \frac{F}{A}$. Calculate the area, giving your answers as decimals to 2 d.p.:

a) force = 1N, pressure = 1N/m² 1m²

b) force = 2N, pressure = 1N/m² 2m²

c) force = 1N, pressure = 2N/m² 0.5m²

d) force = 1N, pressure = 8N/m² 0.13m²

e) force = 4N, pressure = 5N/m² 0.8m²

f) force = 200N, pressure = 150N/m² 1.33m²

g) force = 10N, pressure = 1N/m² 10m²

h) force = 20N, pressure = 1N/m² 20m²

i) force = 1N, pressure = 20N/m² 0.05m²

j) force = 10N, pressure = 8N/m² 1.25m²

k) force = 40N, pressure = 5N/m² 8m²

l) force = 200N, pressure = 1500N/m² 0.13m²