

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<sup>2</sup>

b) 2N over 1cm<sup>2</sup>

c) 10N over 20m<sup>2</sup>

d) 2N over 5cm<sup>2</sup>

e) 10N over 15m<sup>2</sup>

f) 2N over 15cm<sup>2</sup>

g) 5N over 1m<sup>2</sup>

h) 20N over 10cm<sup>2</sup>

i) 100N over 20m<sup>2</sup>

j) 2N over 50cm<sup>2</sup>

k) 100N over 15m<sup>2</sup>

l) 4N over 35cm<sup>2</sup>

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

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

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

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

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

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

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

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

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

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

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

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

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

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 =  $1\text{N/m}^2$

b) force = 2N, pressure =  $1\text{N/m}^2$

c) force = 1N, pressure =  $2\text{N/m}^2$

d) force = 1N, pressure =  $8\text{N/m}^2$

e) force = 4N, pressure =  $5\text{N/m}^2$

f) force = 200N, pressure =  $150\text{N/m}^2$

g) force = 10N, pressure =  $1\text{N/m}^2$

h) force = 20N, pressure =  $1\text{N/m}^2$

i) force = 1N, pressure =  $20\text{N/m}^2$

j) force = 10N, pressure =  $8\text{N/m}^2$

k) force = 40N, pressure =  $5\text{N/m}^2$

l) force = 200N, pressure =  $1500\text{N/m}^2$