Pressure = Force/Area

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Name:

Calculate the pressure on an object when: **Clearly state the units of your answers**

a) A force of 24N is applied to a 4m² area

d) A force of 12N is applied to a 0.4m² area

b) A force of 65N is applied to a 5m² area

e) A force of 36N is applied to a 0.3m² area

c) A force of 105N is applied to a 14m² area

f) A force of 5.4N is applied to a 270cm² area

Calculate the force (N) placed on an object if :

g) An area of 12m² is under a pressure of 6 Pa

j) An area of 0.4m² is under a pressure of 30 Pa

h) An area of 50m² is under a pressure of 12 Pa

k) An area of 2.3m² is under a pressure of 28 Pa

i) An area of 6m² is under a pressure of 14 Pa

l) An area of 500cm² is under a pressure of 40 Pa

Calculate the area, in m², if :

m) A force of 30N is under 5 Pa of pressure

p) A force of 70N is under 1.4 Pa of pressure

n) A force of 36N is under 9 Pa of pressure

q) A force of 516N is under 4 Pa of pressure

o) A force of 180N is under 12 Pa of pressure

r) A force of 84N is under 0.25 Pa of pressure

Exam question:
A force of 94.5N is exerted by a cube which has a side length of 3m.
Calculate the pressure exerted by the cube.