

8th August



Corbettmaths

Expand and simplify $6(w + 3) - 2(w - 5)$

$$6w + 18 - 2w - 10$$

$$= 4w + 8$$

Can you spot any mistakes?

$$-2 \times -5 = +10$$

Four chairs and two tables cost £218.
Six chairs and seven tables cost £587.

$$4x + 2y = 218$$

$$6x + 7y = 587$$

Find the cost of buying twenty chairs and five tables.

$$12x + 14y = 1174$$

$$12x + 6y = 654$$

$$8y = 520$$

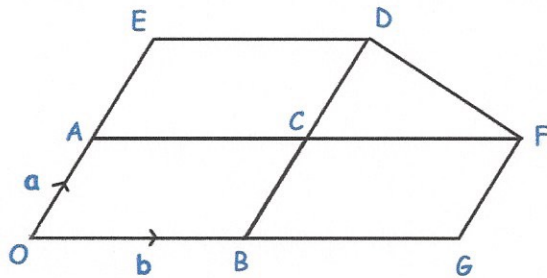
$$y = 65$$

$$x = 22$$

$$20x = 440$$

$$5y = 325$$

$$765$$



Express in terms of **a** and **b** the vector \vec{OC}

$$\underline{a} + \underline{b}$$

A cube with side length 8cm is placed on the ground. The pressure exerted on the ground is 4N/cm^2 .

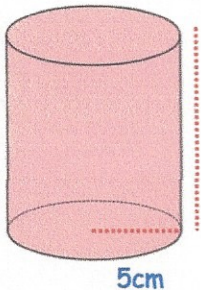
$$8 \times 8 = 64\text{cm}^2$$

What force does the cube exert on the ground?

$$P = \frac{F}{A}$$

$$F = P \times A$$

$$4 \times 64 = 256\text{ N}$$



$$\text{Top } \pi \times 5^2 = 25\pi$$

$$12\text{cm bottom} = 25\pi$$

$$\text{Curved face} = 5 \times 2 \times 12 \times \pi$$

$$= 120\pi$$

Calculate the surface area

$$170\pi\text{ cm}^2$$

or

$$534.07\text{ cm}^2$$