



A is directly proportional to B squared.

When $A = 500$, $B = 10$.

Find A when $B = 20$.

$$A \propto B^2$$

$$A = kB^2$$

$$500 = k \times 10^2$$

$$k = 5$$

$$A = 5B^2$$

$$A = 5 \times 20^2$$

$$A = 5 \times 400$$

$$A = 2000$$

A book weighs 200g to the nearest 10g.

$$205g$$

What is the upper bound of the total weight of 20 books?

$$205 \times 20$$

$$4100g$$

Line 1 has a gradient of $\frac{1}{4}$ and passes through the point $(3, 10)$.

$$10 = \frac{3}{4} + c$$

What is its equation?

$$c = 9\frac{1}{4}$$

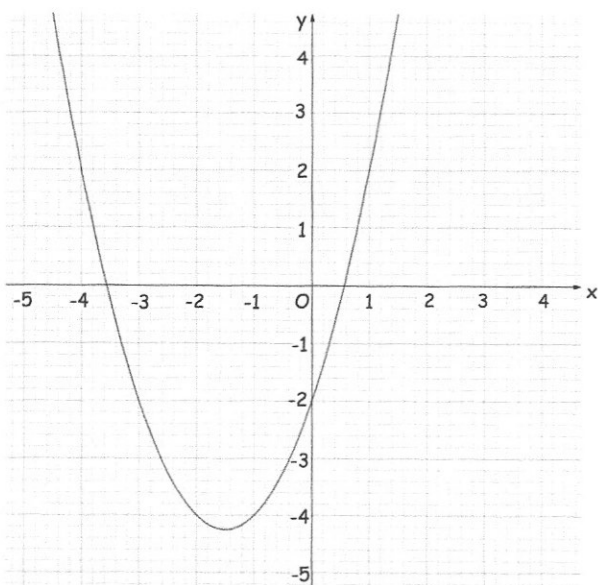
$$y = \frac{1}{4}x + c$$

$$y = \frac{1}{4}x + 9\frac{1}{4}$$

Write down the equation of a line perpendicular to line 1.

$$y = -4x + 1$$

The graph of $y = f(x)$ is shown on the grid.



Write down an estimate for the coordinates of the turning point of the graph.

$$(-1.5, -4.25)$$

Write down the equation of the mirror line of the graph.

$$x = -1.5$$

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