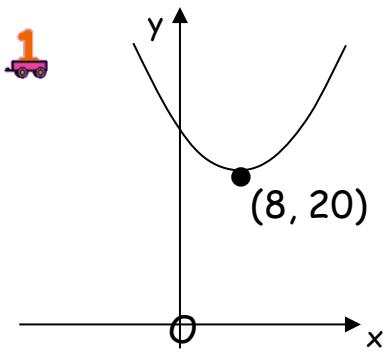
N5 – Relationships Worksheet 3 **Bronze** Level

Outcome 1 - Recognise and determine the equation of a quadratic function from its graph

Write down the equation of the graph, which has the form

$$y = (x + a)^2 + b.$$

1



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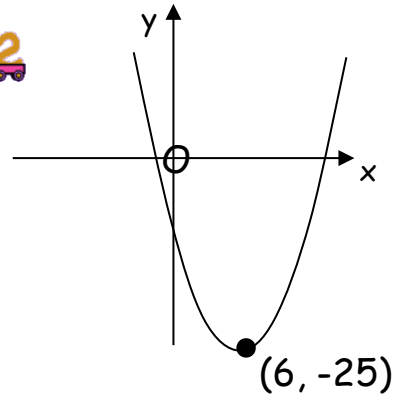

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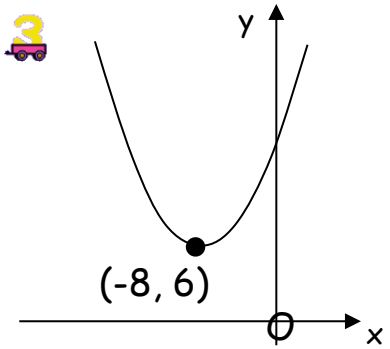

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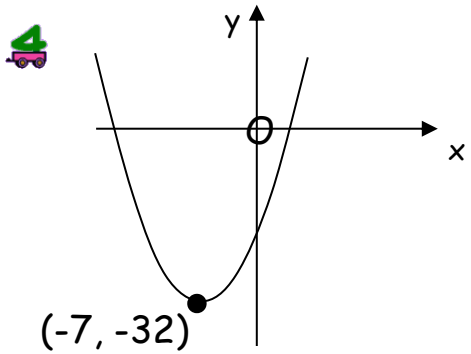

Outcome 2 - Sketching a Quadratic Function

Sketch the following quadratic functions…

1 $y = (x - 9)^2 + 1$ 2 $y = (x + 11)^2 - 3$

3 $y = (x - 20)^2 - 35$ 4 $y = (x + 17)^2 + 19$

Outcome 3 - Identifying Features of a Quadratic Function

For the following quadratic functions identify…

a) The coordinates of the turning point.

b) The nature of the turning point.

c) The equation of the axis of symmetry.

1 $y = (x + 7)^2 + 12$ 2 $y = (x - 8)^2 - 3$

3 $y = (x - 15)^2 - 19$ 4 $y = \left(x + \frac{1}{6}\right)^2 + \frac{3}{9}$