

N5 - Relationships

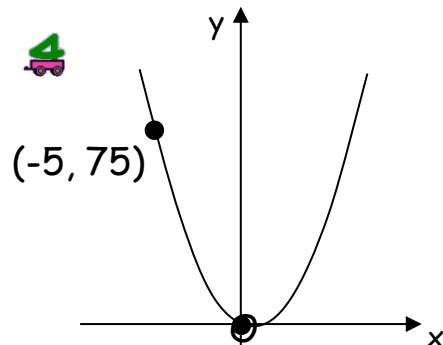
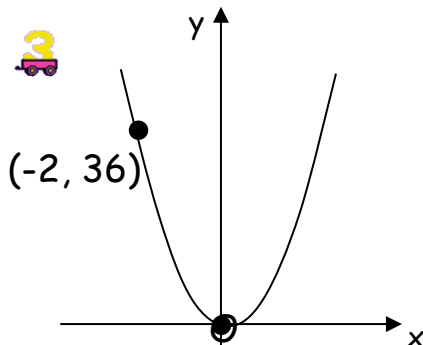
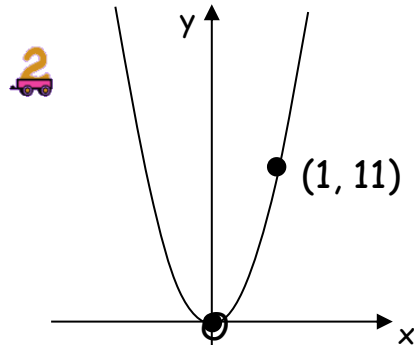
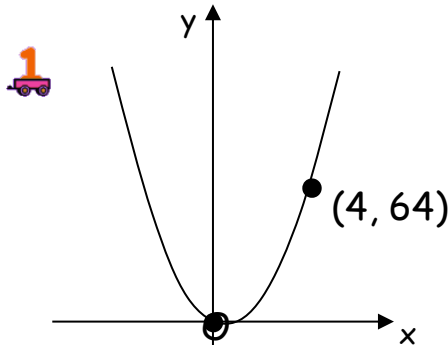
Worksheet 3

Gold Level



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

For the parabolas with equations $y = kx^2$ determine the value of k .



Outcome 2 - Sketching a Quadratic Function

Sketch the following graphs, marking clearly where the graph crosses the axes and state the coordinates of the turning point...

1 $y = (x + 2)(x - 6)$ **2** $y = (x - 9)(x + 1)$

3 $y = (x - 3)(x - 7)$ **4** $y = (x + 4)(x + 10)$

Outcome 3 - Identifying Features of a Quadratic Function

Calculate the coordinates of the turning points of the following parabolas...

1 $y = x^2 + 24x + 80$ **2** $y = x^2 - 2x - 48$

3 $y = x^2 - 144$ **4** $y = x^2 - 20x$