Functions

This problem gives you the chance to:
• work with graphs and equations of linear and non-linear functions

On the grid are eight points from two different functions.

• four points fit a **linear** function

• the other four points fit a **non-linear** function.

For the **linear** function:
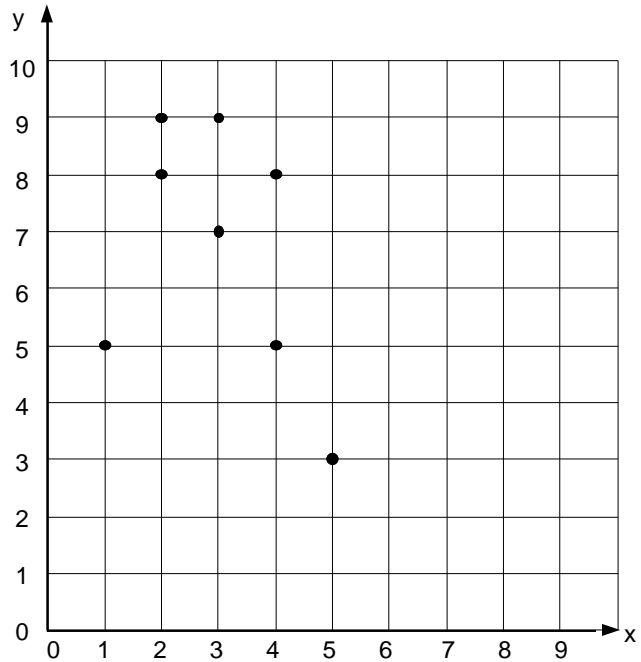
1. Write the coordinate pairs of its four points.

_____

_____

_____

_____

Draw the line on the grid.

2. Write an equation for the function.
   Show your work.

_____

For the **non-linear** function:

3. Write the coordinate pairs of its four points.

_____   _____   _____
_____

Draw the graph of the function on the grid.

4.

The non-linear function is quadratic

The non-linear function is exponential

Chris   **Alex**

Who is correct?   _____

Explain your reasons.

_____
_____

_____
_____

_____
_____

5. Write an equation that fits the non-linear function.

    _____

  Show your work.