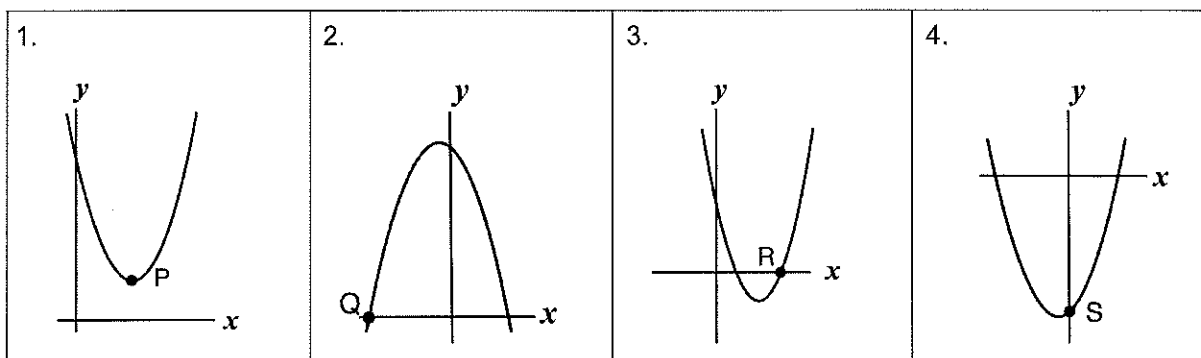# Quadratic Functions

1. Here are 4 equations of quadratic functions and 4 sketches of the graphs of quadratic functions.

A. $y = x^2 - 6x + 8$	B. $y = (x-6)(x+8)$	C. $y = (x-6)^2 + 8$	D. $y = -(x+8)(x-6)$

1.	2.	3.	4.

a. Match the equation to its graph and explain your decision.

Equation A **matches** Graph ....., because

Equation B **matches** Graph ....., because

Equation C **matches** Graph ....., because

Equation D **matches** Graph ....., because

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b. Write the co ordinates of the points: P (....,....)   Q(....,....)   R (....,....)   S (....,....)

2. The graph of a quadratic function has a y intercept at (0,5) and a minimum at (3, −4).

a. Write the equation of its curve.

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b. Write the coordinates of the root(s) of this quadratic function.