

Exam Review Quiz – Quadratics I

1. Write the letter that corresponds to the best response in the blank next to each question.

✓ B

a) Which of these relations is quadratic?

- A. $y = x^3 - 4x^2 + 2x - 1$
- B. $y = 2x^2 + 1$
- C. $y = 3x + 1$
- D. $y = 2x^4 + 3x^2 - 4x$

✓ D

b) A parabola has a vertex of $(6, 4)$ and a step pattern of $2, 6, 10$. The equation of this parabola is:

- A. $y = (x + 6)^2 - 4$
- B. $y = (x - 6)^2 - 4$
- C. $y = 2(x + 6)^2 + 4$
- D. $y = 2(x - 6)^2 + 4$

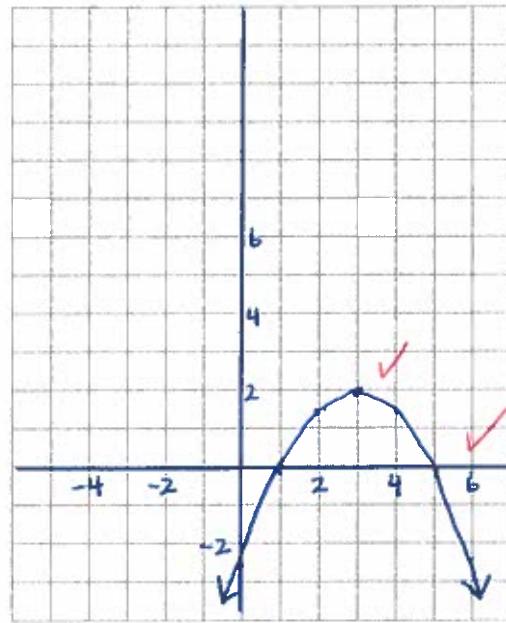
2. Graph the following parabola and state the information requested:

$$y = -\frac{1}{2}(x - 3)^2 + 2$$

a) vertex $(3, 2)$ ✓

h) Graph:

b) max/min value max at $y=2$ ✓



c) direction of opening down ✓

d) axis of symmetry $x=3$ ✓

e) step pattern $-0.5, -1.5, -2.5$ ✓

f) roots/zeroes $x=1, x=5$ ✓

g) transformations on the graph of $y = x^2$

- reflected in x axis ✓

- compressed by factor 2

- shifted right 3 + up 2 ✓