

# QUADRATIC FUNCTION TEST

Extending Expectations

**/15**

- [3]**      1. Identify which of the following relations are quadratic function. If the relation is not quadratic, identify what type of a relation it is.

$y = x^2 + x - 4x^3 + 7$	$y = x^2 + x - 3$	$y = 3x - 2$

- [6]**      2. Write the equation of the parabola with vertex  $(-2, 3)$  that passes through point  $(-4, -5)$ . Describe all transformations.

**[4]**

**3.** Find the equation of the parabola, with axis of symmetry  $x = -5$ , which passes through points  $(-6,8)$  and  $(2,-10)$ .

**[2]**

**4.** What is true about every quadratic function?