

## Post Test – Quarter 1 Week 1 – Illustration of Quadratic Equation

*Directions* Choose the letter that you think best answers the question. Type your answer on the box provided before the number

1. It is a polynomial equation of degree two that can be written in the form  $ax^2 + bx + c = 0$ , where  $a$ ,  $b$ , and  $c$  are real numbers and  $a \neq 0$ .
  - a. Linear Equation
  - b. Linear Inequality
  - c. Quadratic Equation
  - d. Quadratic Inequality
2. Which of the following is a quadratic equation?
  - a.  $3s^2 + s - 4$
  - b.  $m^2 - 8m - 1 = 0$
  - c.  $2x - 1 = 5$
  - d.  $5y^2 + 4y \geq 7$
3. In the quadratic equation  $2x^2 - 9x - 5 = 0$ , which is the quadratic term?
  - a.  $2x^2$
  - b.  $x^2$
  - c.  $-9x$
  - d.  $-5$
4. In the quadratic equation  $2x^2 - 9x - 5 = 0$ , which is the linear term?
  - a.  $2x^2$
  - b.  $x^2$
  - c.  $-9x$
  - d.  $-5$
5. In the quadratic equation  $2x^2 - 9x - 5 = 0$ , which is the constant term?
  - a.  $2x^2$
  - b.  $x^2$
  - c.  $-9x$
  - d.  $-5$
6. In the quadratic equation  $x^2 + 8x - 2 = 0$ , what are the values of  $a$ ,  $b$ , and  $c$ ?
  - a.  $a = 0$ ,  $b = 3$ ,  $c = -1$
  - b.  $a = 1$ ,  $b = 8$ ,  $c = -2$
  - c.  $a = -3$ ,  $b = 0$ ,  $c = -1$
  - d.  $a = 3$ ,  $b = 0$ ,  $c = 1$
7. In the quadratic equation  $3x^2 - 1 = 0$ , what are the values of  $a$ ,  $b$ , and  $c$ ?
  - a.  $a = 0$ ,  $b = 3$ ,  $c = -1$
  - b.  $a = 3$ ,  $b = 0$ ,  $c = -1$
  - c.  $a = -3$ ,  $b = 0$ ,  $c = -1$
  - d.  $a = 3$ ,  $b = 0$ ,  $c = 1$
8. In the quadratic equation  $(y + 5)(y - 5) = 4$ , what are the values of  $a$ ,  $b$ , and  $c$ ?
  - a.  $a = 1$ ,  $b = 5$ ,  $c = -5$
  - b.  $a = 1$ ,  $b = -5$ ,  $c = 5$
  - c.  $a = 1$ ,  $b = 0$ ,  $c = -29$
  - d.  $a = 1$ ,  $b = 0$ ,  $c = 25$
9. What is the standard form of the quadratic equation  $3x(x - 3) = 7$ ?
  - a.  $3x^2 - 9x = 7$
  - b.  $3x^2 - 3x - 7 = 0$
  - c.  $3x^2 - 9x + 7 = 0$
  - d.  $3x^2 - 9x - 7 = 0$
10. What is the standard form of the quadratic equation  $2x + (x - 4)(x + 1) = 9$ ?
  - a.  $x^2 - x - 13 = 0$
  - b.  $x^2 + x + 13 = 0$
  - c.  $x^2 - 5x + 5 = 0$
  - d.  $x^2 - 5x - 13 = 0$