

# Quadratic Equation Worksheet 1

Which of the following are quadratic equations? Give reason in each case.

1.  $(x + 2)^2 = 3(x + 5)$

2.  $x^2 + 3x = (-1)(1 - 3x)^2$

3.  $(x + 3)(x - 4) = x^2 - 2x - 3$

4.  $x^3 - x^2 + 2x + 1 = x^2(x + 1)$

5.  $x^2 + 2x + 1 = (4 - x)^2 + 3$

6.  $(k + 1)x^2 + 32x = 7$ , where  $k = -1$

7.  $x^3 - x^2 + 8 = (x - 1)^3$

8.  $2(x - 1)^2 = 4x^2 - 2x + 1$

9.  $2x - x^2 - 9 = x^2 + 5$

10.  $(x^2 + 2x)^2 = x^4 + 10 + 5x^3$