

Name _____ Class _____ No _____

Identifying Quadratic Equations



Identify which is a quadratic equation.

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|---------------------------|-----------------------|---------------------------|
| 1.) $x^2 + 4x - 12 = 0$ | a. quadratic equation | b. not quadratic equation |
| 2.) $y^3 + y^2 - 5y = 24$ | a. quadratic equation | b. not quadratic equation |
| 3.) $z^2 + 8 = -12x$ | a. quadratic equation | b. not quadratic equation |
| 4.) $x + 7 = 0$ | a. quadratic equation | b. not quadratic equation |
| 5.) $y^2 - 25 = 0$ | a. quadratic equation | b. not quadratic equation |
| 6.) $(3x - 1)(x - 1) = 0$ | a. quadratic equation | b. not quadratic equation |
| 7.) $4m^2 = 0$ | a. quadratic equation | b. not quadratic equation |
| 8.) $x^2 + 6x = 0$ | a. quadratic equation | b. not quadratic equation |
| 9.) $y^2 - 5y = 24$ | a. quadratic equation | b. not quadratic equation |
| 10.) $(7y - 2)(7y - 2)$ | a. quadratic equation | b. not quadratic equation |

For the following quadratic equations, determine whether the value of x is a root or not.

$2x^2 - 7x - 15 = 0$ $x = 5$	a. root	b. not a root
$2x^2 - 7x - 15 = 0$ $x = -4$	a. root	b. not a root
$x^2 + 3x + 2 = 0$ $x = 2$	a. root	b. not a root
$x^2 + 3x + 2 = 0$ $x = -2$	a. root	b. not a root
$x^2 - 225 = 0$ $x = 15$	a. root	b. not a root
$x^2 - 225 = 0$ $x = -15$	a. root	b. not a root
$3x^2 - 10x + 8 = 0$ $x = 2$	a. root	b. not a root
$3x^2 - 10x + 8 = 0$ $x = \frac{4}{3}$	a. root	b. not a root
$3x^2 - 10x + 8 = 0$ $x = 5$	a. root	b. not a root
$2x^2 = 8$ $x = 2$	a. root	b. not a root
$2x^2 = 8$ $x = -2$	a. root	b. not a root
$3x^2 - 11x + 4 = 0$ $x = 1$	a. root	b. not a root
$3x^2 - 11x + 4 = 0$ $x = 2$	a. root	b. not a root
$3x^2 - 11x + 4 = 0$ $x = 3$	a. root	b. not a root