MAth on the Fly!

NAME:	DATE:	

Solving Quadratic Equations by Factoring

Solve each equation.

$$1_{\bullet}$$
 $x^2 + 2x - 15 = 0$

$$2 \cdot x^2 - 5x - 36 = 0$$

$$3$$
 $x^2 + 14x + 49 = 0$

$$|4|$$
 $x^2 - 16 = 0$

$$|5|$$
 $x^2 - 9x = 0$

$$6 \cdot 2x^2 + 3x = 0$$

$$7. \quad 5x^2 - 20x + 20 = 0$$

$$8 3x^3 + 9x^2 + 6x = 0$$

$$9.$$
 $x^2 - 8x = -7$

10.
$$x^2 = x + 6$$

11.
$$x^2 = 25$$

12.
$$12x^2 - 4x = 0$$

$$\boxed{13.} \quad 2x^2 + 7x + 3 = 0$$

$$\boxed{14.} \quad 3x^2 + 10x - 8 = 0$$

$$2x^2 - 5 = 3x$$

$$1 - 5x + 4x^2 = 0$$

SOLUTIONS

$$1.$$
 $x = -5, x = 3$

$$2 \cdot x = 9, x = -4$$

$$3. x = -7$$

$$4 \cdot x = -4, x = 4$$

$$5.$$
 $x = 0, x = 9$

$$6 \cdot x = 0, x = \frac{-3}{2}$$

$$7.$$
 $x = 2$

$$8. \quad x = 0, x = -1, x = -2$$

$$9. x = 1, x = 7$$

10.
$$x = -2, x = 3$$

11.
$$x = -5, x = 5$$

12.
$$x = 0, x = \frac{1}{3}$$

13.
$$x = -3, x = \frac{-1}{2}$$
 14. $x = -4, x = \frac{2}{3}$

14.
$$x = -4, x = \frac{2}{3}$$

15.
$$x = -1, x = \frac{5}{2}$$
 16. $x = 1, x = \frac{1}{4}$

16.
$$x = 1, x = \frac{1}{4}$$