

Name:

ALGEBRA 8 - FINAL REVIEW WORKSHEET



Multiply the following expressions.

1. $(x + 12)(x - 12)$

$$x^2 - 144$$

2. $(3x - 2)(3x + 2)$

$$9x^2 - 4$$

Factor out the GCF of each expression

3. $\frac{9a^3 + 15a^2}{3a^2}$

$$3a^2(3a + 5)$$

4. $\frac{10y^2 + 14y^3 - 2y}{2y}$

$$2y(5y + 7y^2 - 1)$$

Solve.

5. $x^2 + 2x - 3 = 0$

$$(x - 1)(x + 3) = 0$$

$$x = 1 \quad x = -3$$

6. $x^2 + 3x - 4 = 0$

$$(x + 4)(x - 1) = 0$$

$$x = -4 \quad x = 1$$

7. $x^2 - 4x - 5 = 0$

$$(x + 1)(x - 5) = 0$$

$$x = -1 \quad x = 5$$

8. $2x^2 - 11x - 21 = 0$

$$(2x + 3)(x - 7)$$

$$\begin{array}{c} \underbrace{\hspace{1.5cm}} \\ 3x \\ -14x \end{array}$$

$$2x + 3 = 0$$

$$x = -3/2$$

$$x = 7$$