

## Algebra Skills

**Interval/Inequality Notation.**

**Write without the radical.**

1.  $\sqrt[3]{x^2}$

**Simplify.**

2.  $\frac{6z^7}{30z^{n+2}}$

3.  $\frac{2}{x} - \frac{1}{x+2} + \frac{4}{x^2}$

4.  $\frac{4x^5 + 3x^2 + 1}{x^3}$

**Multiply and simplify**

5.  $(x - 5)(2x + 3)$

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

**Factor completely**

7.  $x^3 - 3x^2 - 18x$

8.  $x^4 - 16$

**Solve.**

9.  $x^2 = 9$

10.  $55 = (y - 3)(y + 3)$

11.  $x^2 - 4x = 5$

12.  $6x^2 - 13x - 28 = 0$

13.  $\frac{x^2 - 3x}{x + 5} = 0$

14.  $\frac{x^2 - 3x}{x + 5} = 1$