

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