

Name _____

Algebra I Practice Test 7.1, 7.2, 7.4

Simplify.

1. $(x^{-3}y^8z^{-4})^{-6}(x^2y^{-4}z^5)^2$

2. $(4x^5y^{-2}z^{-1})^2(2x^3y^{-7}z^{-9})^{-5}$

3. $x^{11} \bullet x^9$

4. $(5x^5y)^3$

5. $[(x^4)^3]^5$

6. $(10x^{-3}y^2m^8)(-9xym)$

7. $(y^2)^7$

8. $(-5xy)^2(-3x^4)^3$

9. $\frac{t^{12}}{t^2}$

10. 2^{-6}

11. $\frac{x^8y^4}{x^{10}y}$

12. $\frac{35x^2y^7}{28x^3y^4}$

13. $\frac{8x^{-5}y^3z^{-8}}{12x^9y^{-6}z}$

14. $\left(\frac{22x^5t^8}{11xy}\right)^0$

15. $\left(\frac{5x^4y}{3t^{-7}}\right)^3$

16. $x^{-2}t^5m^{-1}p^0$

17. $\left(\frac{x^{-5}r^4}{x^7r}\right)^{-9}$

18. $\frac{(-5x^{-2}y^5)^3}{(3x^6y^{-5})^4}$

Express each number in standard form.

19. 6.75×10^{-7}

20. 3.421×10^5

Express each number in scientific notation.

21. 0.0000034

22. 600,000,000,000