

Name _____

7.3 worksheet

Simplify. Your answer should not contain any negative exponents.

1. $3^2 \cdot 3^5$

2. $2^4 \cdot 3^4 \cdot 2^{-2} \cdot 3^2$

3. $q^3 \cdot r^2 \cdot q^6$

4. $n^3 \cdot n^{-4} \cdot n$

5. $7^8 \cdot 7^4$

6. $3^{-3} \cdot 5^8 \cdot 3^4 \cdot 5^2$

7. $m \cdot n^{-4} \cdot m^4$

8. $x \cdot x^{-1} \cdot x^{-3} \cdot x^{-4}$

9. $2x^4 \cdot 5x^6$

10. $-3a^{-2} \cdot 7a^8$

11. $6x^7 \cdot 3y^6 \cdot 2x^{-4}$

12. $2b^4c^7 \cdot 5c^8 \cdot 2b^3c^2$

13. $(5^2)^4$

14. $(4^3)^0$

15. $(2^5)^7$

16. $(x^3)^{-5} \cdot x^4$

17. $(3^4)^5$

18. $(6^0)^3$

19. $(a^3)^4 \cdot (a^{-2})^{-3}$

20. $(b^{-2})^5 (b^4)^6$

21. $(x^6 \cdot y^{-3})^2$

22. $(x^2y^3)^4 \cdot (x^2y^4)^{-4}$

23. $(x^4y^{-2})^2(x^3y)^2$

24. $(x^3y^2)^{-2}y^{-2}$

Name _____

7.4 Worksheet

Simplify. Your answer should not contain any negative exponents.

1. $\frac{6^7}{6^5}$

2. $\frac{t^{12}}{t^7}$

3. $\frac{w^9}{w^2}$

4. $\frac{j^2}{j^8}$

5. $\frac{20m^5}{4m^2}$

6. $\frac{c^3 d^2}{c^2 d^5}$

7. $\frac{(x^4)^2}{(x^3)^5}$

8. $\left(\frac{s^3 t}{st^4}\right)^2$

9. $\left(\frac{2}{3}\right)^{-3}$

10. $\left(\frac{3a}{2b}\right)^{-4}$

11. $-\left(\frac{-t}{3v}\right)^{-4}$

12. $\left(\frac{xyz^2}{-w}\right)^5$

13. $\left(\frac{3c}{-2}\right)^{-1} \left(\frac{d}{4}\right)^{-2}$

14. $-\left(\frac{b^2 c}{2d^3 f^4}\right)^{-2}$

15. $\left(\frac{s^2}{t^3}\right)^2$

16. $\frac{h^4}{h^{-3}}$

17. $-\left(\frac{ab}{6c}\right)^5$

18. $\frac{x^5 y^2}{xy^3}$

19. $\frac{m^3 n^6}{m^4 n^4 p^8}$

20. $\frac{a^5 b^2 c^3}{a^6 b^2 c}$

21. $\left(\frac{4}{7}\right)^{-2}$

Find the missing exponent in each equation.

22. $\left(\frac{c^{\square}}{d}\right)^{-2} = \frac{d^2}{c^8}$

23. $\frac{b^{14}}{b^{\square}} = b^7$

24. $\left(\frac{s^{-3}}{t^4}\right)^{\square} = s^9 t^{12}$