

Name \_\_\_\_\_

## Algebra Quiz REVIEW

1. $p^0 q^{12} r^{-8} v^{-1} w^2$	2. $\frac{4^{-3} k^6 m^{-2}}{5^{-2} j^{-4} n^{10}}$	3. Evaluate for $x = -4$ and $y = 5$ $x^2 y^{-3}$
4. Evaluate for $x = -6$ and $y = -1$ $x^2 y^{-5}$	5. Evaluate for $x = 5$ and $y = -2$ $x^{-2} y^{-2}$	6. $-3x^4 \cdot 5x^{-7}$
7. $6m^6(8m^8)$	8. $2b^4 \cdot 4a^{-3} \cdot 5b^{-5} \cdot -2a^8$	9. $a^m \cdot a^n$
10. $p^3 \cdot p^{2k}$	11. $w^x \cdot w^{x+3} \cdot w^{4x+1}$	12. $(a^m)^n$

13. $(b^4)^{-3}$	14. $(m^8)^3(m^5)^6$	15. $81 = 3^x$
16. $(2a^9)^5$	17. $(3cd^4)^3(2c^{-5}d)^2$	18. Solve for x: $(b^2)^x = b^8$
19. Solve for x: $(a^3b^5)^x = a^{24}b^{40}$	20. Solve for x: $(a^2b^6)^x = \frac{1}{a^{10}b^{30}}$	21. $\frac{b^{24}}{b^8}$
22. $\frac{5^{12}}{5^4}$	23. $\frac{42w^9x^{-3}}{3w^{-3}x^6}$	24. rewrite with only 1 exponent: $\frac{27x^3}{8y^3}$

25. rewrite with only 1 exponent:

$$\frac{49m^2}{169m^4}$$

26. Solve for x:

$$8^2 = 2^x$$

27. Solve for x:

$$3^x = 27^4$$

28. Solve for x:

$$4^x = 2^6$$

29.

$$\left(\frac{8m}{16m^4}\right)^2$$

30. Evaluate for  $x = -2$ ,  $y = 4$ ,  $z = -1$

$$\frac{6x^2y^5}{24x^{-1}y^5z^{-2}}$$

31. Evaluate for  $x = -3$ ,  $y = 2$ ,  $z = 4$

$$\frac{27x^2y^0z^{-2}}{9x}$$

32. 
$$\frac{(4x^5)(-3x^5y)}{6xy^{-4}}$$

33. 
$$\frac{a^b}{a^3}$$