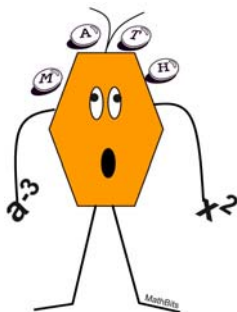




Exponents

Name _____

Directions: Choose the correct letter answer to each question. Use the letters to decode the hidden message. Remember to use the properties of exponents as you work.



3 5 16 1 10 13 15 14 16 4 9 13 16
 5 15 14 16 1 8 2 12 14 9 2
 6 8 16 16 8 2 7 14 2 11!

1. Which choice is equivalent to $3^2 \times 3^{-5}$?
 E. 3^{-3} F. $\frac{1}{3^3}$ G. $\frac{1}{27}$ H. All choices

2. Which choice is equivalent to $\frac{3^3}{6^2}$?
 A. $\frac{9}{36}$ R. $\frac{3}{4}$ Q. $\frac{3}{2}$ R. $\frac{1}{4}$

3. Which choice is NOT equivalent to $\frac{3^2}{3^5}$?
 D. 3^{-3} S. $\frac{1}{3^3}$ M. $\frac{1}{9}$ H. $\frac{1}{27}$

4. Which choice is equivalent to 7^0 ?
 D. 1 E. $\frac{7^2}{7^2}$ C. $\frac{49}{49}$ J. All choices

5. Which choice is equivalent to 8^{-2} ?
 R. 64 S. -64 A. $\frac{1}{64}$ T. $-\frac{1}{64}$

6. Which choice is equivalent to $(4^2)(4^3)$?
 B. 4^6 L. 4^5 I. 64 P. 16

7. Which choice is equivalent to $(3^2)^3$?
 U. 3^5 W. 3^6 I. 3^9 S. None

8. Which choice is equivalent to $4^0 \times 4^{-1}$?
 C. 0 D. 1 E. $\frac{1}{4}$ F. 4

9. Which choice is equivalent to $\frac{(2^4)^3}{(2^7)(2^5)}$?
 U. 1 V. $\frac{1}{2^5}$ X. $\frac{1}{2^7}$ Y. $\frac{1}{2}$

10. Which choice is equivalent to $(3^2)^{-1}$?
 J. 3^2 K. 3^1 I. 3^{-2} P. 3^{-1}

11. Which choice is equivalent to 1^{98} ?
 C. 0 D. 1 E. 98 F. -1

12. Which choice is equivalent to $y^{10} \div y^5$?
 E. y^2 F. y^5 G. y^{10} H. None

13. Which choice is equivalent to $8^{-2} \times 8^4$?
 P. -64 Q. 8^{-8} R. 8^{-6} S. 64

14. Which choice is equivalent to $2^{-3} \times 3^{-2}$?
 P. 6^{-5} B. 6^6 O. $\frac{1}{72}$ T. -72

15. Which choice is equivalent to 1?
 G. $\frac{3^2}{3^2}$ L. 3^{2-2} M. 3^0 N. All choices

16. Which choice is equivalent to $\left(\frac{1}{2}\right)^{-1}$?
 C. $\frac{1}{2}$ A. $\frac{1}{4}$ T. 2 S. 4