

# 1.6 Key

## What Did People Say When Walter Gearloose Tried to Drag His Sheep Across a Frozen Pond?



Write the letter of each correct answer in the box containing the exercise number.

Simplify the expression.

1.  $5^3 \cdot 5^2$  **W** S.  $5^4$   
 2.  $(-5)^7 \cdot (-5)^4$  **A** A.  $(-5)^{11}$   
 3.  $5^8 \div 5^5$  **L** T.  $(-5)^7$   
 4.  $(-5)^{10} \div (-5)^3$  **T** W.  $5^5$   
 5.  $\frac{5^6}{5^5}$  **I** I. 5  
 H.  $(-5)^9$   
 L.  $5^3$

Write the expression without exponents.

11.  $3^2 \cdot 3^3$  **I** N.  $(-3)^5$   
 12.  $(-3)^2 \cdot (-3)^3$  **N** S.  $-9^2$   
 13.  $8^7 \div 8^4$  **G** H.  $(-8)^3$   
 14.  $\frac{(-8)^5}{(-8)^3}$  **T** G.  $8^3$   
 15.  $\frac{(-8)^4}{-8}$  **H** I.  $3^5$   
 A.  $(-9)^2$   
 T.  $(-8)^2$

Write the expression without exponents.

21.  $40^8 \div 40^5$  **O** R.  $9^5$   
 22.  $\frac{(-40)^4}{(-40)^3}$  **V** O.  $40^3$   
 23.  $(-9)^2 \cdot (-9)^2$  **E** G. 0  
 24.  $9 \cdot 9 \cdot 9^3$  **R** E.  $(-9)^4$   
 25.  $\frac{9^2}{9^2}$  **O** O. 1  
 N. 9  
 V. -40

Simplify the expression.

6.  $x^9 \cdot x^2$  **S** U.  $(-x)^{12}$   
 7.  $x^9 \div x^2$  **P** L.  $x^8$   
 8.  $(-x)^6 \cdot (-x)^6$  **U** S.  $x^{11}$   
 9.  $\frac{x^4}{x}$  **L** R.  $(-x)^{30}$   
 10.  $x \cdot x^7$  **L** L.  $x^3$   
 P.  $x^7$   
 N.  $x^6$

Write the expression without exponents.

16.  $10^3 \cdot 10$  **E** O.  $2^7$   
 17.  $-10 \cdot (-10)^5$  **W** A.  $(-10)^2$   
 18.  $\frac{(-10)^{12}}{(-10)^7}$  **O** L.  $(-2)^7$   
 19.  $2^2 \cdot 2^3 \cdot 2^2$  **O** W.  $(-10)^6$   
 20.  $\frac{(-2)^{11}}{(-2)^4}$  **L** D.  $(-2)^{15}$   
 E.  $10^4$   
 O.  $(-10)^5$

What value of n makes the statement true?

26.  $5^7 \cdot 5^n = 5^{10}$  **U** E. 0  
 27.  $(-8)^n \cdot (-8)^4 = (-8)^{15}$  **R** S. 10  
 28.  $12^{10} \div 12^n = 12^2$  **I** I. 8  
 29.  $m \cdot m^n = m^{13}$  **C** D. 2  
 30.  $\frac{m^4}{m^4} = m^n$  **E** R. 11  
 C. 12  
 U. 3

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30  
**W A L T E R G E A R L O O S E T R I E D T O D R A G H I S S H E E P A C R O S S A F R O Z E N P O N D .**