

KSS #2 - Math Practice

Name: _____

Date: _____

1. Lindsay has eight more stickers than Whitney.
 W represents the number of stickers Whitney has.
 Which expression represents the number of stickers Lindsay has?
 A. $W - 8$ B. $W + 8$ C. $W \times 8$ D. $W \div 8$

2. What is the value of the expression below when $R = 1.05$?
 $8 \times R$
 A. 0.84 B. 8.4 C. 84 D. 840

3. Which of the following expressions represents a number (n) less than 12?
 A. $n - 12$ B. $12 - n$
 C. $n + 12$ D. $12 + n$

4. What is the value of the expression below when $n = \frac{6}{7}$?
 $n - \frac{3}{7}$
 A. $\frac{2}{7}$ B. $\frac{3}{7}$ C. $\frac{4}{7}$ D. $\frac{9}{7}$

5. Which property of real numbers is illustrated below?
 $x(y + z) = xy + xz$
 A. Associative Property of Addition
 B. Associative Property of Multiplication
 C. Distributive Property
 D. Commutative Property of Multiplication

6. Which of the following are inverse operations?
 A. multiplication and addition
 B. square root and division
 C. subtraction and taking square root
 D. addition and subtraction
7. Which of the following is true for all possible values of x ?
 A. $3(x + 1) = 3x + 1$ B. $2(x + 3) = 2x + 6$
 C. $4(2x + 1) = 6x + 5$ D. $5(3x - 2) = 15x - 7$
8. Which of the following shows an application of the distributive property?
 A. $(6xy + 4xy) + 2xz = 6xy + (4xz + 2xz)$
 B. $2xy + 3xz + 5xy = 2xy + 5xy + 3xz$
 C. $4xy - 12xz = 4x(y - 3z)$
 D. $-5xy + 5xy + 3xz = 3xz$
9. Which of the following statements describes how to use an inverse operation to solve the equation $c + 6 = 16$?
 A. Multiply both sides of the equation by six because multiplication is the inverse operation of addition.
 B. Subtract six from both sides of the equation because subtraction is the inverse operation of addition.
 C. Add six to both sides of the equation because addition is the inverse operation of subtraction.
 D. Divide both sides of the equation by six because division is the inverse operation of addition.

10. Ted used the expression $10 + c + 2c$ to show the total number of ice-cream cones he sold in one day. Ted used the Commutative Property of Addition and created an equivalent expression.

Which of the following expressions did Ted create?

- A. $2c + c + 10$ B. $2 \times (c + c) + 10$
C. $2(c + 5) + 2c$ D. $4c + 10$

11. Which of these equations shows the Associative Property of Multiplication?

- A. $(a \times b)c = a(b \times c)$
B. $a(b \times c) = (a \times b) \times (a \times c)$
C. $a \times 1 = 1 \times a$
D. $(a \times b) \times c = (b \times a) \times c$

12. The equation below is an example of which property of real numbers?

$$2x \cdot \left(\frac{1}{2x}\right) = 1$$

- A. Multiplicative identity property
B. Multiplicative inverse property
C. Associative property of multiplication
D. Commutative property of multiplication

13. The expression $4(5 - 3y) + 3(y + 2)$ is simplified in the following steps.

$$\text{Step 1 } 4(5 - 3y) + 3(y + 2) = 20 - 12y + 3y + 6$$

$$\text{Step 2 } = 20 - 9y + 6$$

$$\text{Step 3 } = 20 + 6 - 9y$$

$$\text{Step 4 } = 26 - 9y$$

Which property was used to go from Step 2 to Step 3?

- A. commutative property
B. additive identity
C. associative property
D. distributive property

14. An isosceles triangle has two sides with length x .

The third side is $\frac{1}{2}$ of x . What is the perimeter?

- A. $2\frac{1}{2}x$ B. $3x$ C. $4\frac{1}{2}x$ D. $5x$

15. Erica volunteered to go to the board to show how to correctly add $(x - 1)$ and $3(x + 2)$.

What should Erica's answer be?

- A. $2x + 5$ B. $2x + 4$ C. $4x + 1$ D. $4x + 5$