KSS #2 (Math Assessment)

Name: _____ **Date:** _____

1. 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. $-5xy + 5xy + 3xz = 3xz$

2. Which of the following expressions represents a number (n) less than 12?

   A. $n - 12$ B. $12 - n$

   C. $n + 12$ D. $12 + n$

3. 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

4. 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

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 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. $5(3x - 2) = 15x - 7$

7. 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. $(a \times b) \times c = (b \times a) \times c$