

Name : _____

Score : _____

Teacher : _____

Date : _____

Working with the Properties of Mathematics

- 1) Which property is used in the following expression ? $(a \times b) \times c = a \times (b \times c)$
- A. Associative Property of Multiplication B. Distributive Property _____
C. Commutative Property of Addition D. Associative Property of Addition _____
- 2) Which Property of Addition does $2 + 0 = 2$ illustrate ?
- A. Distributive Property B. Commutative Property _____
C. Zero Property D. Identity Property _____
- 3) The value of any nonzero number will be changed by _____ .
- A. dividing by one B. multiplying by zero _____
C. adding zero D. multiplying by one _____
- 4) Which is an example of Identity Property of Addition ?
- A. $7 + 2 = 2 + 7$ B. $5 + 0 = 5$ _____
C. $6 \times 1 = 6$ D. $(2 + 4) + 8 = 2 + (4 + 8)$ _____
- 5) Which equation shows the Multiplicative Inverse of a Number ?
- A. $a + -a = 0$ B. $a \times (1/a) = 1$ _____
C. $a \times 0 = 0$ D. $a \times 1 = a$ _____
- 6) Which of the following is an example of Commutative Property of Addition ?
- A. $8 + 7 = 7 + 8$ B. $9 \times 1 = 9$ _____
C. $5 + 4 = 6 + 5$ D. $(7 + 2) + 3 = 7 + (2 + 3)$ _____
- 7) Which property is used in the following expression ? $6(9 + 8) = 54 + 48$
- A. Commutative Property of Addition B. Associative Property of Multiplication _____
C. Associative Property of Addition D. Distributive Property _____
- 8) Which property would you use to simplify the following expression ? $9(y + 7)$
- A. Multiplication Property of Zero B. Associative Property _____
C. Commutative Property D. Distributive Property _____
- 9) Which equation shows the Zero Property of Multiplication ?
- A. $3 \times 1 = 3$ B. $5 \times 0 = 0$ _____
C. $8 \times 9 = 9 \times 8$ D. $4 + 4 + 4 = 3 \times 4$ _____
- 10) Which property of addition is used in the following ? $(7 + 8) + 9 = 7 + (8 + 9)$
- A. Commutative Property B. Associative Property _____
C. Distributive Property D. Identity Property _____



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21) Which equation shows the Identity Property of Multiplication ?

A. $(a + b) + 7 = a + (7 + b)$

B. $a + a + a = 3 \times a$ _____

C. $a(b + c) = ab + ac$

D. $a \times 1$

22) Which equation shows the Commutative Property of Multiplication ?

A. $8 \times 6 = 6 \times 8$

B. $5 \times 9 - 3 \times 9 = (5 - 3) \times 4$ _____

C. $7 \times 1 = 7$

D. $4 \times 3 = 4 + 4 + 4$

23) Which equation shows the Addition Property of Zero ?

A. $a \times 0 = 0$

B. $a + 0 = a$ _____

C. $a(b + c) = ab + ac$

D. $(a + b) + 7 = a + (7 + b)$

24) Simplify this expression : $8(y + z)$

A. $8y + 8z$

B. $8y + z$ _____

C. $8z + y$

D. $8yz$

25) Which operation will not change the value of any nonzero number ?

A. Dividing by Zero

B. Multiplying by Zero _____

C. Adding One

D. Adding Zero

26) Which property is represented in the following statement ? If $a = a$: anything is congruent to itself.

A. Symmetric Property of Equality

B. Property of Equality for Division _____

C. Reflexive Property of Equality

D. Transitive Property of Equality

