

Name : \_\_\_\_\_ Score : \_\_\_\_\_

Teacher : \_\_\_\_\_ Date : \_\_\_\_\_

### Working with the Properties of Mathematics

- 1 ) Which equation shows the Commutative Property of Multiplication ?  
A.  $3 \times 5 = 5 \times 3$  B.  $2 \times 1 = 2$  \_\_\_\_\_  
C.  $9 \times 4 - 8 \times 4 = (9 - 8) \times 7$  D.  $7 \times 3 = 7 + 7 + 7$
- 2 ) Which Property of Multiplication is shown ?  $(5 + 7) \times 6 = 5 \times 6 + 7 \times 6$   
A. Distributive Property B. Associative Property \_\_\_\_\_  
C. Identity Property D. Commutative Property
- 3 ) Which property is used in the following expression ?  $5(6 + 4) = 30 + 20$   
A. Distributive Property B. Associative Property of Multiplication \_\_\_\_\_  
C. Commutative Property of Addition D. Associative Property of Addition
- 4 ) Simplify this expression :  $2(y + z)$   
A.  $2z + y$  B.  $2y + 2z$  \_\_\_\_\_  
C.  $2y + z$  D.  $2yz$
- 5 ) Which is an example of Identity Property of Addition ?  
A.  $3 + 9 = 9 + 3$  B.  $(9 + 2) + 4 = 9 + (2 + 4)$  \_\_\_\_\_  
C.  $7 + 0 = 7$  D.  $5 \times 1 = 5$
- 6 ) Which is an example of Associative Property of Addition ?  
A.  $5 + 0 = 5$  B.  $9 + (-9) = 0$  \_\_\_\_\_  
C.  $(6 + 4) + 3 = 6 + (4 + 3)$  D.  $8 + 6 = 6 + 8$
- 7 ) Which property is used in the following expression ?  $(a \times b) \times c = a \times (b \times c)$   
A. Associative Property of Addition B. Distributive Property \_\_\_\_\_  
C. Commutative Property of Addition D. Associative Property of Multiplication
- 8 ) Which property of addition is used in the following ?  $(3 + 4) + 5 = 3 + (4 + 5)$   
A. Distributive Property B. Associative Property \_\_\_\_\_  
C. Commutative Property D. Identity Property
- 9 ) Which Property of Addition does  $7 + 0 = 7$  illustrate ?  
A. Zero Property B. Commutative Property \_\_\_\_\_  
C. Distributive Property D. Identity Property
- 10 ) Which property is used in the following ?  $9 \times (2 + 8) = 9 \times 2 + 9 \times 8$   
A. Associative Property B. None of the above \_\_\_\_\_  
C. Distributive Property D. Commutative Property



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### Working with the Properties of Mathematics

11 ) Which of the following is an example of Commutative Property of Addition ?

A.  $7 + 9 = 9 + 7$

B.  $3 \times 1 = 3$

C.  $(9 + 8) + 6 = 9 + (8 + 6)$

D.  $2 + 5 = 4 + 2$

12 ) Which of the following does not show the Commutative Property ?

A.  $4 + y = y + 4$

B.  $xy - 5 = xy$

C.  $yx = xy$

D.  $x + y = y + x$

13 ) Which property is used in the following expression ?  $(3 \times 7) \times 2 = 7 \times (2 \times 3)$

A. Associative Property of Multiplication

B. Associative Property of Addition

C. Distributive Property of Multiplication

D. Commutative Property of Addition

14 ) Which of the following does not show the Commutative Property of Addition ?

A.  $a + b = b + a$

B.  $8 + x = x + 8$

C.  $ab = ba$

D.  $3x + 4y = 4y + 3x$

15 ) Which property would you use to simplify the following expression ?  $6(y + 3)$

A. Commutative Property

B. Multiplication Property of Zero

C. Associative Property

D. Distributive Property

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

A. Multiplying by One

B. Adding One

C. Multiplying by Zero

D. Dividing by Zero

17 ) Which equation shows the Identity Property of Multiplication ?

A.  $a \times 1$

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

C.  $(a + b) + 2 = a + (2 + b)$

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

