

Math Properties Worksheet

Match the descriptions in the left and right columns.

Name _____

1. _____ $ab = 0 \Rightarrow a = 0 \text{ or } b = 0$

2. _____ $a \cdot (-b) = (-a) \cdot b = -(ab)$

3. _____ $a \cdot \frac{1}{a} = 1 \quad \text{if } a \neq 0$

4. _____ $a + (-a) = 0$

5. _____ $a + 0 = a$

6. _____ $a \cdot 1 = a$

7. _____ $(a + b) + c = a + (b + c)$

8. _____ $a(b + c) = ab + ac$

9. _____ $(ab)c = a(bc)$

10. _____ $ab = ba$

11. _____ $a + b = b + a$

12. _____ $a = a$

13. _____ $a = b \Leftrightarrow b = a$

14. _____ $a = b \text{ and } b = c \Rightarrow a = c$

15. _____ $a = b \text{ and } f(a) = c \Rightarrow f(b) = c$

A. symmetric property

B. principle of substitution

C. commutative property of multiplication

D. associative property of addition

E. commutative property of addition

F. transitive property

G. multiplicative inverse property

H. distributive property

I. associative property of multiplication

J. additive inverse property

K. rule of signs

L. multiplicative identity property

M. additive identity property

N. zero product rule

O. reflexive property