

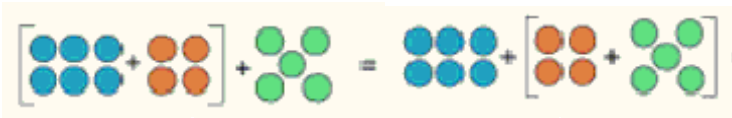
Prealgebra Review #10: Properties of Numbers

Properties of Real Numbers		
Property	Addition	Multiplication
Commutative Property	$a + b = b + a$	$a \cdot b = b \cdot a$
Associative Property	$a + (b + c) = (a + b) + c$	$a \cdot (b \cdot c) = (a \cdot b) \cdot c$
Distributive Property	$a \cdot (b + c) = a \cdot b + a \cdot c$	
Identity Property	$a + 0 = a$	$a \cdot 1 = a$
Inverse Property	$a + (-a) = 0$	$a \cdot \frac{1}{a} = 1$

1.

Identify the property which applies to each example.

A.



B.

$$3(7 + 4) = 3(7) + 3(4)$$

C.



Simplify. Use the properties to make this an easier problem.

1) $2(73)(5)$

2) $-5 \cdot 4 \cdot 67 \cdot (-5)$

3) $-\frac{3}{5} + \frac{7}{8} + \frac{9}{8} + \frac{3}{5}$

Decide whether the statement is an example of the commutative, associative, identity, inverse, or distributive property.

4) $7 + (-7) = 0$

5) $4 \cdot 1 = 4$

6) $\left(\frac{8}{5}\right)\left(\frac{5}{8}\right) = 1$

7) $(8 \cdot 4) \cdot 1 = 8 \cdot (4 \cdot 1)$