

# HOMWORK

## Properties of Real Numbers

Credited for you by Ms. Nhotsaubanh!

**Directions:** Circle the correct response for each multiple choice question.

- 1.) Which property of real numbers is illustrated by the equation  $52 + (27 + 36) = (52 + 27) + 36$ ?  
*order is the same*
- (a) commutative property
  - (b) distributive property
  - (c) associative property
  - (d) identity property of addition

- 2.) Which property is represented by the statement  $\frac{1}{2}(6a + 4b) = 3a + 2b$ ?
- (a) commutative
  - (b) associative
  - (c) distributive
  - (d) identity

- 3.) The reciprocal of 5 is
- (a) 1
  - (b)  $-\frac{1}{5}$
  - (c)  $\frac{1}{5}$
  - (d) -5
- 5 → 1/5*

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Glue on page 39

4.) Which statement best illustrates the additive identity property?

(a)  $6 + 2 = 2 + 6$

(b)  $6 + (-6) = 0$

(c)  $6(2) = 2(6)$

(d)  $6 + 0 = 6$

5.) If  $a$  and  $b$  are both odd integers, which expression must always equal an odd integer?

(a)  $a + b$   $3 + 5 = 8$

(b)  $a \cdot b$   $3 \cdot 5 = 15$

(c)  $a - b$   $3 - 5 = -2$

(d)  $\frac{a}{b}$   $\frac{3}{5}$

6.) What is the additive inverse of the expression  $a - b$ ?

(a)  $a + b$  opposites  $-a + b$

(b)  $-a + b$

(c)  $a - b$

(d)  $-a - b$

7.) Which equation illustrates the distributive property?

(a)  $5(a + b) = 5a + 5b$

(b)  $a + (b + c) = (a + b) + c$

(c)  $a + b = b + a$

(d)  $a + 0 = a$

**Directions:** State the property shown below. Use your foldable notes.

8.)  $3 + 5 = 5 + 3$  commutative +

9.)  $3(x + 6) = 3x + 18$  distributive

10.)  $4 + 0 = 4$  identity +

11.)  $(4 + 8) + 5 = 4 + (8 + 5)$  associative +

12.)  $3(4) = 4(3)$  commutative X

13.)  $ab + ac = a(b + c)$  distributive

14.)  $(2m)n = n(2m)$  comm. X

15.)  $4(1) = 4$  identity X

16.)  $(7 + 1) + 2 = 7 + (1 + 2)$  assoc. +

17.)  $5 \cdot \frac{1}{5} = 1$  mult. inverse

18.)  $(22 + m)3 = 66 + 3m$  distributive

19.)  $\sqrt{200} + 0 = \sqrt{200}$  identity +

20.)  $9 + 4w = 4w + 9$  comm +

21.)  $2m(3n) = 3n(2m)$  commutative X

22.)  $(2q + 4) + q = 2q + (4 + q)$  assoc +

**QUIZ FRIDAY... INCLUDE PARALLEL AND PERPENDICULAR LINES**