Midterm Additions ---- Introductory Algebra

1. State the properties of Real numbers being illustrated.
   1. 5 + ( -5) = 0 \_\_\_\_\_ b. ( -7) + 0 = ( - 7) \_\_\_\_\_\_\_\_\_\_\_

c. \_\_\_\_\_\_\_ d. is equivalent to \_\_\_\_\_\_\_\_\_\_

e. 3 + 4 + (-3) is equivalent to 3 + (-3) + 4 \_\_\_\_\_\_\_\_\_ f. \_\_\_\_\_\_\_\_\_

g. (-7) \* 1 = (-7) \_\_\_\_\_\_\_\_ h.

i. is \_\_\_\_\_\_\_\_\_\_\_\_\_\_ j. \_\_\_\_\_\_\_\_\_

k. is \_\_\_\_\_\_\_\_\_\_\_\_\_\_ l. \_\_\_\_\_\_\_\_\_\_

m. \_\_\_\_\_\_\_\_\_\_\_\_ n. ( 8 + 6 ) + 4 = 8 + ( 6 + 4 ) \_\_\_\_\_\_\_\_\_\_



*List the numbers in the set that are:*

* 1. Natural numbers \_\_\_\_\_\_\_\_\_\_\_\_\_\_ b. Integers \_\_\_\_\_\_\_\_\_\_\_ c. Irrational \_\_\_\_\_\_\_\_\_\_\_

d. Whole numbers \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ e. Rational \_\_\_\_\_\_\_\_\_\_\_\_ f. Real numbers \_\_\_\_\_\_\_\_\_

1. Simplify the following (x ≠ ) :
   1. = b. = c. =

Answers:

1a. additive inverse b. additive identity

c. commutative for multiplication d. multiplicative identity

e. commutative for addition f. multiplicative inverse / reciprocal

g. multiplicative identity h. associative for multiplication

i. 0 j. commutative property

k. undefined l. multiplicative inverse / reciprocal

m. zero property n. associative for addition

2a. { 9} b. { -4, 0, 9 } c. { -4.020020002… , π }

d. { 0, 9 } e. { 6.8, , -4, 0 , 5.123123… , 9 } f. all

3a. 0, if x ≠ b. undefined c.