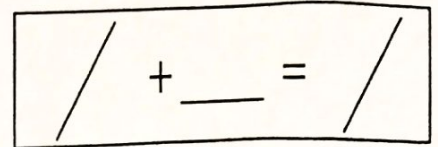


Name: \_\_\_\_\_ Period: \_\_\_\_\_



## Intermediate 1 Review of Chapter 3:

Evaluate the following if:  $x = -3, y = 4, z = -5$  *SHOW ALL WORK*

1.  $|6x - 3y|$                       2.  $xyz$                                       3.  $4z - (2y - x)$

30

60

-31

Evaluate the following if:  $a = 6, b = -3$  and  $c = 7$  *SHOW ALL WORK*

4.  $\frac{a(8-5)}{2b}$                       5.  $ac - ab + b^2$                       6.  $4a - (b + c)$

-3

69

20

Name the property shown by each statement.

*Commutative(+or x)*    *Associative(+or x)*    *Identity(+or x)*    *Multiplicative Property of Zero*

7.  $3 \cdot (5 \cdot x) = (3 \cdot 5) \cdot x$

A.

8.  $0 \cdot 3 = 3 \cdot 0$

C.

9.  $(5 + a) + b = 5 + (a + b)$

A+

10.  $x + (4y + 5) = (x + 4y) + 5$

A+

11.  $g \cdot 1 = g$

I.

12.  $0x = 0$

0

13.  $2 + a = a + 2$

C+

14.  $12 \cdot 1 = 12$

I.

15.  $22 \cdot 1 = 22$

I.

16.  $0 \cdot (3 \cdot 7) = 0$

0

17.  $(2 + 6) + b = b + (2 + 6)$

C+

18.  $x + (3y + 8) = (x + 3y) + 8$

A+

Simplify using the distributive property. Must show work for credit

19.  $8(2x + 9) + 5$

$16x + 77$

20.  $-5(-3x + 2)$

21.  $\frac{3}{4}(8x + 16)$

$6x + 12$

22.  $10 - 3\left(\frac{2}{7}x - 1\right)$

Find the GCF of each pair of monomials.

23.  $12x, 30x$

$6x$

24.  $24acd, 36cd$

25.  $18c, 20ab$

$2a$

26.  $60km, 144m$

Factor each expression. If the expression cannot be factored, write *cannot be factored*.

27.  $30x + 18$       28.  $9gh - 63fg$       29.  $24x + 48$       30.  $12x - 5y$       31.  $45xy - 81y$

$$6(5x + 3)$$

$$24(x + 2)$$

$$9y(5x + 9)$$

Simplify each expression (combine like terms).

32.  $8y + 2y - y$

33.  $4r + 6 + 10r + 12$

34.  $3e + 7f + 2e + 6f$

$$14r + 18$$

35.  $11y + y - 2y$

36.  $h + h + 3$

37.  $6 + 3r - r + 12$

$$10y$$

$$2r + 18$$

38.  $6r + 4 - 7r + 16$

39.  $12 - x + 6$

40.  $2y + 3x - y + 5x$

$$-x + 18$$

Write each expression in simplest form.

41.  $(19y + 5) + (13y - 18)$

42.  $(4a - 5b) + (-6a + 11b)$

43.  $(3 - 15a) - (9 + 7a)$

$$32y - 13$$

$$-22a - 6$$

44.  $(2x - 7) - (-5x - 8)$

45.  $(-12m - 8) + (m - 2)$

46.  $(-16c + 27) - (-11c + 18)$

$$-11m - 10$$

47.  $4(3x - 6) - 5(-4x - 10)$

48.  $-3(-11m - 2) + 9(-7m - 2)$

49.  $6(-5c + 6) - 3(-6c + 8)$

$$32x + 26$$

$$-12c + 12$$