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)

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)

Name the property shown by each statement.

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

7. 3·(5·x) = (3·5)·x **8.** 0·3 = 3·0

9. (5 + a) + b = 5 + (a + b) **10.** x + (4y + 5) = (x + 4y) + 5

11. g·1 = g **12.** 0x = 0

13. 2 + a = a + 2 **14.** 12 · 1 = 12

15. 22·1 = 22 **16.** 0·(3·7) = 0

17. (2 + 6) + b = b + (2 + 6) **18.** x + (3y + 8) = (x + 3y) + 8

Simplify using the distributive property. Must show work for credit

19. 8(2x + 9)+ 5 20. -5(-3x + 2) 21. $\frac{3}{4}(8x+16)$ 22. 10 - 3($\frac{2}{7}$x – 1)

Find the GCF of each pair of monomials.

23. 12x, 30x 24. 24acd, 36cd 25. 18c, 20ab 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. $45xy - 81y$

Simplify each expression (combine like terms).

32. $8y + 2y - y$ 33. $4r + 6 + 10r + 12$ 34. $3e + 7f + 2e + 6f$

35. $11y + y - 2y$ **36.** $h + h + 3$ 37. $6 + 3r - r + 12$

38. $6r + 4 - 7r + 16$ 39. $12 - x + 6$ 40. $2y + 3x - y + 5x$

Write each expression in simplest form.

41. $(19y + 5) + (13y - 18)$ 42. $(4a - 5b) + (-6a + 11b)$ 43. $(3 - 15a) - (9 + 7a)$

44. $(2x - 7) - (-5x - 8)$ 45. $(-12m - 8) + (m - 2)$ 46. $(-16c + 27) - (-11c + 18)$

47. $4(3x - 6) - 5(-4x - 10)$ 48. $-3(-11m - 2) + 9(-7m - 2)$ 49. $6(-5c + 6) - 3(-6c + 8)$