Test Review for 2nd Six Weeks Test 2018

Name:

Block: Date:

Fill in the blank with the correct vocabulary word.

1. What word is used to describe the 3 in the expression; $4x + 3y - 7$ _____.
2. A(n) _____ _____ is made up of numbers, variables, and at least one operation.
3. The part of an expression that does NOT contain a variable is the _____.
4. A decimal that stops like 0.75 is an example of a _____ decimal.
5. Part of an expression separated by an addition or subtraction sign is a(n) _____.
6. A letter that stands for a number is a(n) _____.
7. To simplify an expression you must combine all the _____ _____.

Translate the following verbal phrases into algebraic expressions.

8. double the sum of nine and a number
9. two inches greater than photograph length
10. the quotient of three and a number
11. eight less than the product of 5 and a number
12. sixteen increased by four times the square of a number

Simplify each algebraic expression or fraction below. Circle your final answer.

13. $5w - y + 7w - 2y$
14. $-40 - 9b + 32 - (-6b)$
15. $5f + 3[2(f - 7) + 4]$
16. $3 - 9c - 7a + 2(c - 7) + a$
17. $9x - (-4 - x) + 18$
18. $a^2 + 7a - 14 + a^2 - a + 3$

Conversions: (Simplify all fraction answers)

19. a) F to D: $-2\frac{4}{9}$

    b) Terminating or Repeating

20. D to F: 18.076

21. a) F to D: $3\frac{3}{7}$

    b) Terminating or Repeating

Identify each as Rational or Irrational by circling the appropriate word.

22. $\sqrt{2}$ Rational Irrational	*23.* $0.\overline{3}$ Rational Irrational	*24.* $-9\frac{5}{6}$ Rational Irrational

Find the Greatest Common Factor for each set.

25. 54 *and* 90	*26.* 112 *and* 204	*27.* 32, 128, *and* 56

Factor (Be sure to factor the GCF!)

28. $14x - 42$	*29.* $9 - 21a$	*30.* $24x^2 + 60x$

Equations – solve for the variable. Circle your final solution.

31. Which of the following has a solution of -12? a. $-6x = 2$ b. $18 - x = 30$ c. $\frac{x}{-4} = -3$ d. $x - (-8) = -20$	*32.* $0.2x + 2.8 = -4$	*33.* $3x + 5 = 8 - 3(4 - x)$
34. $\frac{x}{5} - 16 = 4$	*35.* $9x - (-6) = 39$	*36.* $x + 3\frac{1}{4} = -8\frac{1}{3}$
37. $6x - 5 + x = 2x + 10$	*38.* $-42 = -8 + \frac{x}{10}$	*39.* $4(x + 2) + 9 = 2x + 17 + 2x$
40. $\frac{3x-26}{4} = -2$	*41.* $\frac{x+14}{-6} = -1$	*42.* $3x + 2x = \frac{13x-2}{3}$