Hello students,

I hope you had a fun and restful summer. I look forward to working with you this year.

The material on the following worksheets is meant to serve as a review of skills learned in previous math classes.

Please bring completed worksheets to be turned in on first day of class.

Thank you,

Mrs. Weigle
Skills Test

Prerequisite Skills Test

Add or subtract.
1. \(-9 + (-15)\)  
2. \(2 + (-3)\)  
3. \(6 - 9\)  
4. \(-6 - 11\)  
5. \(13 + 8\)  
6. \(-12 - (-10)\)

Multiply or divide.
7. \(2(-7)\)  
8. \(-8 \cdot 2\)  
9. \(9 ÷ 3\)  
10. \(25 ÷ (-5)\)  
11. \(-30 ÷ (-6)\)  
12. \(-1(-7)\)

Solve the problem and specify the units of measure.
13. The length of a rectangle is 6 feet and the width is 3 feet. Find the perimeter of the rectangle.
14. One side of a square measures 9 centimeters. Find the area of the square.

Graph the number.
15. \(4\)  
16. \(|-3|\)  

17. \(-6 + 5\)  
18. \(1 - |-3|\)  

Complete the statement with <, >, or =.
19. \(3\)____\(7\)  
20. \(-1\)____\(4\)  
21. \(-4\)____\(-10\)  
22. \(|-6|\)____\(-3\)

Evaluate the expression for the given value of \(x\).
23. \(2x - 6; x = 9\)  
24. \(-7 + 9x; x = 3\)  
25. \(12x + 13; x = 5\)
Evaluate the expression for the given value of \( x \).

26. \(-x - 12; x = 4\)  
27. \(13 - 7x; x = -10\)  
28. \(11x + 17; x = -6\)

Plot the point in the coordinate plane. Describe the location of the point.

29. \(A(4, 2)\)  
30. \(B(-1, 3)\)  
31. \(C(-5, -3)\)  
32. \(D(3, 0)\)

Use the graph to answer the question.

33. Which ordered pair corresponds to point \(U\)?
34. Which ordered pair corresponds to point \(S\)?
35. Which point is located in Quadrant II?

Solve the equation for \( y \).

36. \(2x - y = 3\)  
37. \(3x + 2y = -4\)  
38. \(-2x = 6y + 3\)

39. \(0 = 7x - y + 12\)  
40. \(-2y + x = 4y - 6\)

Solve the inequality. Graph the solution.

41. \(p + 6 > 9\)  
42. \(3x - 4 < 2\)

43. \(-4m + 6 \leq 22\)  
44. \(5x + 1 \leq 3x - 9\)
Graph the equation.

45. \( y - 2 = 2x \)

46. \( 2y + x = 8 \)

47. \( 2x - 3y = 6 \)

48. \( 14 + 7 - 2^2 + (-3) \cdot 2 - 1 \)

49. \(-4 - \left(3 + 6^2\right) + 13 - 1^2 \cdot (-12)\)

Evaluate the expression.

50. \( \sqrt{25} \)

51. \(-\sqrt{81} \)

52. \( \pm\sqrt{9} \)

53. \(-\sqrt{144} \)

Find the square root(s).

54. \(3, 6, 9, 12, \ldots\)

55. \(7, 0, -7, -14, \ldots\)

56. \(2, 13, 24, 35, \ldots\)

Write an equation for the \(n\)th term of the arithmetic sequence.

57. \(7x - 1 + 2x \)

58. \(3m + 2 - 6m + 8 - 1 \)

59. \(-4(2y - 1) + 3y - 7 \)

60. \(3(d + 3) - (2d - 1) + 11d + 8 \)

Simplify the expression.

61. \(3x^2 - 6 \)

62. \(2x^2 - 6x + 1 \)

63. \(-x^2 - 5x - 1 \)

64. \(x^2 + 3x + 8 \)

65. \(-2x^2 + 4x + 3 \)

66. \(-3x^2 - 6 - x \)

Evaluate the expression when \(x = -3\).

67. \(y = 2x + 1\)

68. \(y = -\frac{1}{2}x + 1\)

69. \(y = \frac{2}{3}x - 4\)

Solve the system of linear equations by graphing.

64. \(y = 2x + 1\)

65. \(y = x + 1\)

66. \(y = -\frac{4}{3}x + 2\)