

Review Packet for Incoming Algebra 1 Honors Students

Name \_\_\_\_\_ Teacher \_\_\_\_\_

Evaluate each expression using order of operations

1.  $57 \cdot 29 + 89$  \_\_\_\_\_ 2.  $187 - 34 \div 2$  \_\_\_\_\_ 3.  $12 - 7 \cdot 3 + 9^2$  \_\_\_\_\_

4.  $80 \div 4 \cdot 2 - 2 \cdot 2$  \_\_\_\_\_ 5.  $3(4 + 7 \cdot 2) - 100 \div 50$  \_\_\_\_\_

6.  $2[3(4 \cdot 5 + 2) - 1] - 4$  \_\_\_\_\_

Given  $a = 5$ ,  $b = 3$  and  $c = 4$ , evaluate the algebraic expression

7.  $a + b + c$  \_\_\_\_\_ 8.  $a^2 + b^2$  \_\_\_\_\_ 9.  $a^2 - b^2$  \_\_\_\_\_ 10.  $(a + b) - c$  \_\_\_\_\_

11.  $a^2 + b^2 + c^2$  \_\_\_\_\_ 12.  $b^2 + (c + a)^2$  \_\_\_\_\_

Simplify the following

13.  $-(-10)$  \_\_\_\_\_ 14.  $|-20|$  \_\_\_\_\_ 15.  $|6 - 7|$  \_\_\_\_\_

Simplify the following algebraic expressions

16.  $3(x + y) + 7x$  \_\_\_\_\_ 17.  $x + y - (3x + y)$  \_\_\_\_\_ 18.  $(4x - 2) - (5x - 3)$  \_\_\_\_\_

19.  $-3(2 - 8m)$  \_\_\_\_\_ 20.  $(3 - a) + (4a - 3b + 2) - (1 - b)$  \_\_\_\_\_

21.  $\frac{-18x + 12}{6}$  \_\_\_\_\_ 22.  $\frac{32y + 24}{8}$  \_\_\_\_\_

Solve each equation for the variable

23.  $x + 2 = 5$  \_\_\_\_\_ 24.  $-x + 2 = 3$  \_\_\_\_\_ 25.  $3x = 15$  \_\_\_\_\_

26.  $-3 - x = 2$  \_\_\_\_\_ 27.  $\frac{1}{3}x = 9$  \_\_\_\_\_ 28.  $4x - 8 = 40$  \_\_\_\_\_

29.  $15y + 31 = 61$  \_\_\_\_\_ 30.  $5(3x + 5) = 4x - 8$  \_\_\_\_\_

Graph each linear equation on graph paper using a table of values.

31.  $y = x + 2$  32.  $y = 3x - 1$  33.  $y = x$

34.  $x + y = 2$

Simplify:

35.  $-2 + 9$  \_\_\_\_\_ 36.  $6 + (-6)$  \_\_\_\_\_ 37.  $-8 - 2$  \_\_\_\_\_

38.  $-3.4 + 7$  \_\_\_\_\_ 39.  $-42 \div 6$  \_\_\_\_\_ 40.  $-18 \div -6$  \_\_\_\_\_

41.  $0 \cdot -9$  \_\_\_\_\_ 42.  $3 \div 0$  \_\_\_\_\_ 43.  $0 \div 3$  \_\_\_\_\_

44.  $-17 \cdot 3$  \_\_\_\_\_

Complete the following chart.

Fraction	Decimal	Percent
45. _____	.009	_____
46. $\frac{1}{8}$	_____	_____
47. _____	_____	135%
48. _____	.8	_____
49. _____	_____	1.8%
50. $\frac{1}{3}$	_____	_____
51. _____	_____	.05 %

52. Find 40 % of 50 \_\_\_\_\_

53. 30 is 60% of what number? \_\_\_\_\_

54. What % of 80 is 60? \_\_\_\_\_

55. 2 is what % of 100? \_\_\_\_\_

56. Find 180 % of 40 \_\_\_\_\_

57. Find 35 % of 50 \_\_\_\_\_

58. The original price of a car is \$15,000 Find the percent of decrease if the sale price of that same car is \$ 13, 050 \_\_\_\_\_

59. A house originally had 1700 square feet but added an extra 255 square feet. What was the percent of increase? \_\_\_\_\_

60. The sale price of a television set is \$280 which represents 30% off the original price. What was the original price of the television? \_\_\_\_\_