

Beat the Basics 3

Date _____ Algebra _____

Evaluate each using the values given.

1) $y - (x - x)$; use $x = 4$, and $y = 5$

2) $a - (b + b)$; use $a = 6$, and $b = 2$

Solve each equation.

3) $-2 = \frac{x - 3}{9}$

4) $-6x - 3 = -3$

5) $4(1 + 7n) - 7 = -3 + n$

6) $\frac{5}{2} - \frac{7}{3}r = -\frac{25}{4}$

Solve each of the following word problems by any method. Show all of your work. Answer each question in a full sentence.

7) Emily spent half of her weekly allowance on clothes. To earn more money her parents let her wash the car for \$9. What is her weekly allowance if she ended with \$16?

8) A wise man once said, "200 reduced by twice my age is 90." What is his age?

Evaluate each expression.

9) $\frac{3}{5} - -\frac{11}{6}$

10) $-\frac{1}{2} + \frac{8}{7}$

$$11) -\frac{7}{5} \cdot -\frac{3}{2}$$

$$12) \frac{-11}{6} \div \frac{11}{6}$$

Solve each problem.

13) 32 is what percent of 52?

14) 62% of what is 70?

Find the selling price of each item.

15) Original price of a CD: \$20.00
Discount: 50%
Tax: 6%

16) Cost of a jacket: \$370.00
Markup: 79%
Tax: 2%

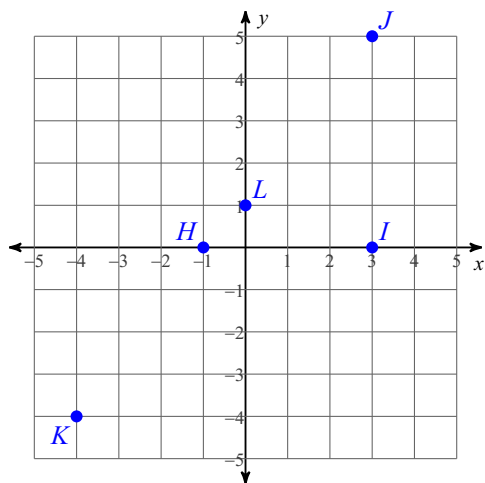
Round each to the place indicated.

17) 4.53; tenths

18) 7.09539; ten-thousandths

Clearly label each point with its coordinates.

19)



Answer each question and round your answer to the nearest whole number.

20) Union and Johnstown are 2 cm apart on a map that has a scale of 1 cm : 16 km. How far apart are the real cities?