Beat the Basics 6 Name_____ ID: 1

Date_____ Algebra____

Evaluate each using the values given.

1) $5(b^2 - (a + 4) + a)$; use $a = 5$, and $b = 3$

2) $2y(x + x)^2 + y$; use $x = 1$, and $y = 5$

Solve each equation.

3) $\frac{-6 + n}{2} = -4$

4) $3 = 8 + \frac{x}{2}$

5) $-34 - 8x = -8(5 + 2x) + 8x$

6) $1 + \frac{1}{2}p = -\frac{1}{4}$

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

7) Molly spent half of her weekly allowance at the movies. To earn more money her parents let her clean the gutters for $7. What is her weekly allowance if she ended with $14?

8) Willie had some paper with which to make note cards. On his way to his room he found five more pieces to use. In his room he cut each piece of paper in half. When he was done he had 16 half-pieces of paper. With how many sheets of paper did he start?

Evaluate each expression.

9) $-1 - -\frac{15}{8}$

10) $-\frac{1}{2} + \frac{2}{5}$

11) $-\frac{1}{2} \cdot -\frac{5}{3}$

12) $\frac{-3}{2} \div \frac{-3}{2}$

Solve each problem. Round to the nearest tenth

13) 3 is what percent of 50?

14) 50% of what is 24?

Find the selling price of each item.

15) Original price of a puppy: $270.00
Discount: 40%
Tax: 3%

16) Cost of a camera: $874.99
Markup: 65%
Tax: 4%

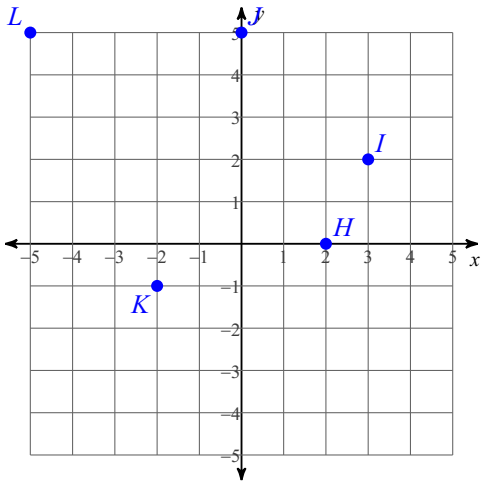
Round each to the place indicated.

17) 5.7470; hundredths

18) 0.0139; thousandths

Clearly label each point with its coordinates.

19)



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

20) A map has a scale of 3 cm : 19 km. If Franklin and Johnstown are 57 km apart, then they are how far apart on the map?