

## Beat the Basics 10

Date \_\_\_\_\_ Algebra \_\_\_\_\_

**Evaluate each using the values given.**

1)  $y \div 5(-5 - 5) + x - y$ ; use  $x = 6$ , and  $y = -5$

2)  $x + xy + y - (x + y)$ ; use  $x = -5$ , and  $y = -5$

**Solve each equation.**

3)  $5 + \frac{m}{-14} = 6$

4)  $3 = \frac{n - 3}{3}$

5)  $-2(5 + 8a) = 38 + 8a$

6)  $\frac{29}{6} = -\frac{5}{3}x - \frac{3}{2}$

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

7) A wise man once said, "300 reduced by 3 times my age is 66." What is his age?

8) The Cooking Club made some pies to sell during lunch to raise money for an end-of-year banquet. The cafeteria contributed two pies to the club. Each pie was then cut into four pieces and sold. There were a total of 28 pieces to sell. How many pies did the club make?

**Evaluate each expression.**

9)  $\frac{3}{2} - -\frac{10}{7}$

10)  $-1 + \frac{6}{7}$

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

12)  $\frac{9}{5} \div \frac{-3}{2}$

**Solve each problem. Round to the nearest whole number.**

13) 69 is 75% of what?

14) 134 is what percent of 150.5?

**Find the selling price of each item.**

15) Original price of a tie: \$18.00  
Discount: 50%  
Tax: 4%

16) Original price of a hat: \$4.50  
Tax: 3%

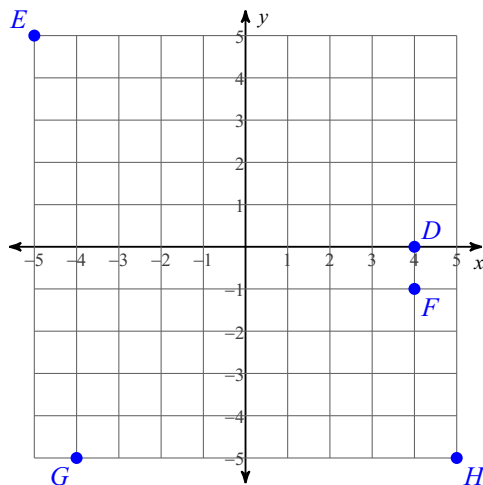
**Round each to the place indicated.**

17) 6.74982; hundredths

18) 1.29429; thousandths

**Clearly label each point with its coordinates.**

19)



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

20) A particular train is 9 ft tall. A model of it was built with a scale of 2 in : 3 ft. How tall is the model?