

Beat the Basics 8

Date _____ Algebra _____

Evaluate each expression.

1) $5 - (10 - 4) \div 6$

2) $2 \cdot 3 + 6 - 3$

Evaluate each using the values given.

3) $6 - (x - y)$; use $x = 3$, and $y = 2$

4) $3(y + x)$; use $x = 3$, and $y = 1$

Write each as an algebraic expression.

5) 3 cubed

6) 9 increased by n 7) the difference of n and 4

8) the difference of 21 and 3

Evaluate each expression.

$$9) -2 + -\frac{3}{4}$$

$$10) -\frac{3}{4} + \frac{3}{8}$$

$$11) -\frac{3}{7} + -\frac{5}{4}$$

$$12) \frac{1}{2} + \frac{8}{5}$$

$$13) -\frac{1}{3} \cdot \frac{4}{5}$$

$$14) -\frac{2}{3} \cdot \frac{3}{2}$$

$$15) \frac{-9}{8} \div \frac{-3}{4}$$

$$16) -2 \div \frac{3}{2}$$

Solve each equation.

17) $6 + \frac{x}{2} = -1$

18) $-1 = \frac{2+r}{14}$

19) $4v + 8 = 28$

20) $-2b - 3b = -10$

21) $-17 + 6x = 7(4x + 7)$

22) $-\frac{5}{3}x - \frac{5}{2} = -\frac{5}{18}$

Round each to the place indicated.

23) 9.97932; thousandths

24) 9.189; tenths

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

25) The currency in Tonga is the Pa'anga. The exchange rate is approximately 14 Pa'anga for \$7. At this rate, how many dollars would you get if you exchanged 28 Pa'anga?

26) A triangle is 1 in tall and 2 in wide. If it is enlarged to a height of 7 in, then how wide will it be?

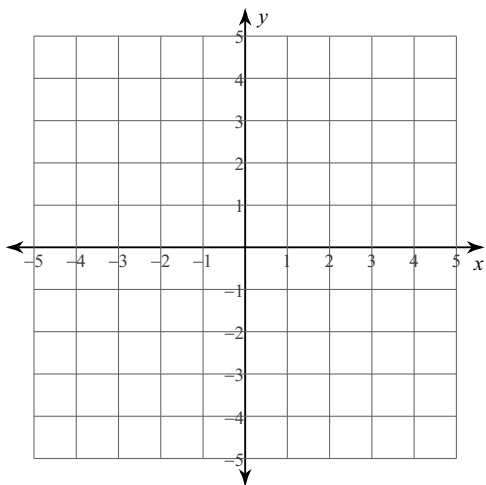
27) Shanice won 96 pieces of gum playing hoops at her school's game night. Later, she gave three to each of her friends. She only has 6 remaining. How many friends does she have?

28) Danielle spent half of her weekly allowance on candy. To earn more money her parents let her wash the car for \$9. What is her weekly allowance if she ended with \$14?

For number 29: Plot each point and label it with the correct letter.

For number 30: State the coordinates of each point and label with the correct letter.

29) $U(-3, 5)$ $T(0, -5)$ $S(3, -3)$
 $R(-3, -4)$ $Q(3, -5)$



30)

