

## HOMWORK - UNIT 1 EXPRESSIONS & EQUATIONS

\*REMEMBER, WRITE YOUR HOMEWORK ON A SEPARATE SHEET OF NOTEBOOK PAPER AND TURN IN TO COACH CARNES. YOU WILL WANT TO WRITE YOUR ANSWERS ON THIS SHEET OF PAPER SO YOU CAN CHECK THAT THEY'RE CORRECT BEFORE THE TEST.

### August 16

Give 2 ways to write each expression in words:

1.  $p \div 10$  p divided by 10, the quotient of p and 10, p in 10 equal parts
2.  $x - 3$  x minus 3, 3 subtracted from x, 3 less than x
3.  $7t$  7 multiplied by t, 7 times t, the product of 7 and t
4.  $c + 15$  c plus 15, the sum of c and 15, 15 added to c

Write the expression using numbers and variables:

1. f divided by 3  $\frac{f}{3}$  or  $f \div 3$
2. t added to 12  $t + 12$  or  $12 + t$
3. x times 8  $8x$
4. y subtracted from 9  $9 - y$

Write the expression:

1. George drives at 45 mi/h. Write an expression for the number of miles George travels in  $h$  hours.  $45h$
2. Julia wrote 14 letters to friends each month for  $y$  months in a row. Write an expression to show how many total letters Julia wrote.  $14y$

### August 17/18

Evaluate the expression for  $x = 6$  and  $y = 3$ :

1.  $xy$  18
2.  $x - y$  3

Evaluate the expression for  $a = 24$  and  $b = 8$

1.  $a \div b$  3
2.  $a + b$  32

Evaluate the expression:

1.  $\frac{7 \cdot 3}{15 - 12}$  7
2.  $(3 + 4)^2 - 15 \cdot -1$  64
3.  $\frac{8 \cdot 9}{15 - 3}$  6

Write the expression & evaluate:

1. Juan scored 26 points in the first half of the basketball game, and he scored  $n$  points in the second half of the game. Write an expression to determine the number of points he scored in all. Then, find the number of points he scored in all if he scored 18 points in the second half of the game.  $26 + n$ ; 44 points
2. Isabel reads 15 books from the library each month for  $y$  months in a row. Write an expression to show how many books Isabel read in all. Then, find the number of books Isabel read if she read for 12 months.  $15y$ ; 180 books
3. Ann sleeps 8 hours per night. Write an expression for the number of hours Ann sleeps in  $n$  nights. How many hours will she sleep in one week?  $8n$ ; 56 hours

## August 22

*Solve the equation:*

1.  $6 = t/5$   $t = -30$

2.  $3n = 42$   $n = 14$

3.  $17 = w - 4$   $w = 21$

4.  $9 = s + 9$   $s = 0$

5.  $44 = 14 - 2a$   $a = -15$

6.  $15y + 31 = 61$   $y = 2$

7.  $14 = g/3 - 7$   $g = 63$

8.  $-2 = k/4 + 9$   $k = -44$

## August 23

*Combine Like Terms:*

1.  $4x - y - 13 + 6y - 17x + 3$   $-13x + 5y - 10$

2.  $3r - 7r^2 + 7s - 15 + 4r^2 + -12s + 8$   $-3r^2 + 3r - 5s - 7$

3.  $3a^2 - 4a^3 + 8a - 1a^2 + 9a - 2a^3$   $-6a^3 + 2a^2 + 17a$

*Solve the equation:*

1.  $43a + 10 - 26a = 27$   $a = 1$

2.  $6 = -2(7 - c)$   $c = 10$

3.  $2(x+3) = 10$   $x = 2$

4.  $2y - 7 + 5y = 0$   $y = 1$

## August 26

*Write an equation & solve:*

1. Jennifer is saving money to buy a bike. The bike costs \$245. She has \$125 saved, and each week she adds \$15 to her savings. How long will it take her to save enough money to buy the bike?

$$245 = 125 + 15w; w = 8$$

2. Paul bought a student discount card for the bus. The card costs \$7 and allows him to buy daily bus passes for \$1.50. After one month, Paul spends \$29.50. How many daily bus passes did Paul buy?

$$7 + 1.50d = 29.50; d = 15$$

3. Seven less than twice a number equals 19.

$$2x - 7 = 19; x = 13$$

4. Eight decreased by 3 times a number equals 2.

$$8 - 3x = 2; x = 2$$

## August 29

Solve the equation:

1.  $n - 8 + n = 1 - 4n$   $n = \frac{9}{6}$
2.  $-6m - 6 + 8m = -5 + 2m - 1$  All real numbers
3.  $2x - 2 = 4x + 6$   $x = -4$
4.  $3x + 5 = 2x + 2$   $x = -3$
5.  $3(2x - 1) + 5 = 6(x + 1)$  No solution
6.  $2(x+4) - 5 = 2x + 3$  All real numbers