

Name: \_\_\_\_\_

Date: \_\_\_\_\_

# 11k

Mrs. Roumbos

8A Period \_\_\_\_\_

Literal Equations Day 2 Homework

1) Which of the following equations is equivalent to  $2y + 5x = 16$ ?

a)  $y = 2x + 6$       c)  $y = \frac{5}{2}x + 8$

b)  $y = -\frac{5}{2}x + 8$       d)  $y = \frac{2}{5}x + 8$

2) The formula  $A = prt + p$  gives the amount of money in a savings account due to simple interest. Which of the following formulas, gives the time,  $t$ , the money has been in the account?

a)  $\frac{A-p}{pr}$       c)  $\frac{A-pr}{p}$

b)  $\frac{A-2p}{r}$       d)  $\frac{A+p-r}{p}$

3) The distance a free falling object has traveled can be modeled by the equation  $d = \frac{1}{2}at^2$ , where  $a$  is acceleration due to gravity and  $t$  is the amount of time the object has fallen. What is the  $t$  in terms of  $a$  and  $d$ ?

a)  $t = \sqrt{\frac{da}{2}}$       c)  $t = \left(\frac{da}{d}\right)^2$

b)  $t = \left(\frac{2d}{a}\right)^2$       d)  $t = \sqrt{\frac{2d}{a}}$

4) The formulas for the area of a trapezoid is  $A = \frac{1}{2}h(b_1 + b_2)$ . Express  $b_1$  in terms of  $A$ ,  $h$ , and  $b_2$ .

5) What is the value of  $x$  if  $5a - 3x = 2b + 4x$

a)  $\frac{5a-2b}{7}$       c)  $\frac{2b-5a}{7}$

b)  $\frac{5a+2b}{-7}$       d)  $\frac{5a+2b}{7}$

6) If  $7x + 2a = 3x + 5a$ , then  $x$  is equal to

a)  $\frac{7a}{10}$       c)  $\frac{3a}{4}$

b)  $\frac{7a}{4}$       d)  $\frac{3a}{10}$

7) Solve  $5x - 8w = 9z$  for  $x$ .

a)  $\frac{8w-9z}{5}$       c)  $\frac{9z+8w}{5}$

b)  $\frac{9z-8w}{5}$       d)  $\frac{9z+8w}{-5}$

8) If  $\frac{x}{4} - \frac{a}{b} = 0$ ,  $b \neq 0$ , then  $x$  is equal to

a)  $\frac{a}{4b}$       c)  $-\frac{4a}{b}$

b)  $\frac{4a}{b}$       d)  $-\frac{a}{4b}$

9) Solve for  $d$ :  $s = a + (n - 1)d$

10) Solve for  $y$ :  $ax + by = c$

11) Solve for  $s$ :  $V = 27s^3$

12) The volume of a large can of tuna fish can be calculated using the formula  $V = \pi r^2 h$ . Write an equation to find the radius,  $r$ , in terms of  $V$  and  $h$ .