

# 0.2 Evaluate Equations

## ALGEBRA

Write your questions here!



$y =$

Ex 1: Solve for  $y$ , when  $x =$

Ex 2: Solve for  $x$ , when  $y =$

Ex 3: Complete the table using the following equation:  $b =$

A	B

Ex 4: The amount of money in Mr. Bean's wallet is fifty dollars take away five dollars for each kid that asks for lunch money.

- a. What's the equation? Define your variables.
- b. How much money does Mr. Bean have if he gave money to all 9 of his children?
- c. How many children did Mr. Bean give money to if he has \$30 in his wallet?

Ex 5: The student council needs to raise \$400 so they hold a talent show and sell tickets. Every student ticket costs two dollars and each adult ticket costs five dollars.

- a. What's the equation? Define your variables.
- b. How many adult tickets do you need to sell if you sell 200 student tickets?
- c. How many student tickets do you need to sell if you sell 50 adult tickets?

YOU TRY!!!

1) Complete the table for the equation:

G	H

2) Mr. Kelly has to grade some Algebra tests and some Geometry tests. He has 34 total tests.

a. What's the equation? Define your variables.

b. How many Geometry tests does he have to grade if he grades 14 Alg tests?

## SUMMARY:

Now,  
summarize  
your notes  
here!



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## PRACTICE

**Directions: Use the following equation to solve:  $y = -2x + 7$**

1) Find  $y$ , when  $x = -5$ .

2) Find  $x$ , when  $y = -21$

**Directions: Use the following equation to solve:  $n = \frac{m}{5} + 6$**

3) Find  $m$ , when  $n = -2$ .

4) Find  $n$ , when  $m = 0$ .

**Directions: Complete each table using the given equation.**

5)  $\frac{x-5}{2} = y$

x	y
-9	
	-6
10	
	-21

6)  $2e - 3f = 24$

e	f
3	
0	
	-6
	0

7)  $2x - 3 = y$

x	y
-4	
	-6
10	
	0

8)  $2e = f + 8$

e	f
5	
0	
	-6
	13

**Directions: For each situation come up with an equation, define your variables and answer the questions. SHOW WORK.**

9) Mr. Bean loves collecting soda cans. He currently has 50 soda cans and gets 12 more every week.

a) What's an equation for this situation? Define your variables.

b) How many soda cans will he have after 10 more weeks?

c) How many weeks will it take Mr. Bean to have 150 cans?

10) Mr. Sullivan two thank you's from students when he is available in the morning. Mr. Kelly gets ten thank you's every time he helps students at lunch. The hope to get 100 THANK YOU'S from students combined.

- a) What's an equation for this situation? Define your variables.
- b) How many lunches will Mr. Kelly have to work if Mr. Sullivan works 5 mornings?
- c) How many mornings will Mr. Sullivan have to work if Mr. Kelly works with kids for 5 lunches?

11) The amount of money Mr. Brust made this summer was equal to the \$55 he started with and the \$15 for every lawn he mowed while staying at his parents' house.

- a) What's an equation for this situation? Define Your variables.
- b) How many lawns does he need to mow if he wants to make \$800 so he can finally buy himself an iPhone?
- c) How much money does he have if he mowed 13 yards this summer?

## 0.2 Evaluate Equations

## WRAP UP

**Directions:** Use the following equation to solve:

$$k = \frac{m}{5} - 9$$

1) Find  $m$ , when  $k = -5$

**Directions:** For the given situation come up with an equation, define your variables and answer the questions. **SHOW WORK.**

2) Mr. Kelly and Mr. Sully each make some new units for Geometry. Total they need to make 12 units.

a) What's an equation? Define the variables.

b) How many units does Mr. Kelly need to do if Mr. Sullivan does 8 units?

3) The Algebros (Mr. Bean, Mr. Brust, Mr. Kelly and Mr. Sullivan) currently have combined to teach over 10,000 students right now. Each year that number increases by 450 students.

a) What is an equation that shows the total number of students taught? Define your variables.

b) How many years until the Algebros have taught over 20,000 students?

c) How many students will they have taught in 7 years?

d) What is a value for the number of years taught that you could put into your equation that wouldn't make sense for this situation? Why does it not make sense in this situation?

e) What is a value for the number of students taught that you could put into your equation that wouldn't make sense for this situation? Why doesn't it make sense in this situation?