Station 1:

Answer the following questions about:

$$m + 13 = 77$$

- A) What is the variable in this problem?
- B) Is this an <u>equation</u> or <u>expression</u>? Why? (Hint: Use your notes if you need to! We wrote down both of these words)
- C) Write two other ways to say this other than "*m plus* thirteen is seventy-seven"

BONUS!

A Number Puzzle

Choose any number. Add the number that is 1 more than your original number. Add 11. Divide by 2. Subtract your original number. What is your answer? Do the puzzle again for other numbers. Why do you get the answers that you get? Will this always work?

Station 2:

- A) A number (n) plus five is seven. Write and solve and equation to find n.
- B) Thirteen less than a number (n) is eight. Write and solve and equation to find n.
- C) The product of two and a number (n) is negative eighteen. Write and solve and equation to find n.
- D) The sum of seven and some number (n) is 3. Write and solve and equation to find n.

Station 3:

- A) The ratio of chocolate to peanut butter in a cookie recipe is given by the equation 3c = 2p where c is the number of cups of chocolate used and p is the number of cups of peanut butter used. If Ms. Pint is baking and uses $\frac{6}{5}$ cups of $\frac{6}{5}$ peanut butter, how many cups of chocolate does she need?
- B) The tallest red pine tree in Minnesota is 22 feet higher than the tallest white pine in Minnesota. If the tallest red pine is 126 feet tall. Write and solve an equation to find the height of the tallest white pine.
- C) Ms. Hall works the BFS program in the summer. If she works for 6 weeks and makes \$480 total, how much does she make per week? *Write and solve an equation.*

Station 4:

E)
$$(-3) \cdot (-4)$$

C)
$$-2 + (-4)$$

G)
$$-5 + 7$$

D)
$$14 + 7$$

H)
$$-1 + (-1)$$

ANSWER BANK:

12

26 -2

21 -6 -14

18

Station 5:

Solve each equation:

1)
$$4 + u = -10$$

$$2) 6y = -36$$

3)
$$\frac{j}{-2} = 6$$

4)
$$y - 9 = -1$$

5)
$$-2 + p = 5$$

6)
$$-4r = -16$$

BONUS!

- 1. Two fathers and two sons sat down to eat eggs for breakfast. They are exactly three eggs, each person had an egg. Explain how this could be.
- 2. A farmer is trying to cross a river. He is taking with him a rabbit, carrots and a fox, and he has a small raft. He can only bring 1 item a time across the river because his raft can only fit either the rabbit, the carrots or the fox. How does he cross the river. (You can assume that the fox does not eat the rabbit if the man is present, you can also assume that the fox and the rabbit are not trying to escape and run away)

Station 6:

- A) If there are twelve pens in a brown paper bag and Ms. Pint tells us there are 25 total pens in front of class, how many pens must another student be holding? *Write and solve an equation.*
- B) Ms. Hall bought a bag of Dum Dums for her students and wants to give each student the same number. If she has 50 students and will give out total 150 suckers, how many suckers does each student get? Write and solve an equation.

C) The difference of some number and 8 is -12. Write and solve an equation.