Math 60, Sections 2.5-2.6 Group Activity Name:_____

Section 2.5 Solving One-Step Equations

1. To prepare for our class game, solve and check these one-step equations with your group. Show your operation and write the solution set. Make sure everyone in your group understands the process.

a. $y+1=-10$

b. $z-12=5$

c. $15=-3x$

d. $-7z=8$

e. $x-(-7)=7$

f. $t-\frac{2}{3}=-\frac{7}{6}$

g. $-\frac{1}{5}x=-20$

h. $\frac{x}{12}=-\frac{3}{4}$

2. Solving one-step equations Kahoot Game: https://play.kahoot.it/#/k/6e8041d6-0e44-4140-93a9-23ce4e1bbde1. Have one person from your group with a smartphone go to kahoot.it.

Write down the equation and your step to solve it in each box.

1.	2.	3.
4.	5.	6.
7.	8.	9.
10.	11.	12.
13.	14.	15.
16.	17.	18.
19.	20.	21.
22.	23.	24.
25.	26.	27.
28.	29.	30.

Applications of Solving One-Step Equations

3. Write and solve an equation for each scenario given. Include units in your answer.

a. The circumference of a frisbee is 20π cm. Find the radius.

b. A fish tank has a volume of 2598.528 cubic inches. The base is 20.1 inches by 10.1 inches. Find the height of the tank.

c. A triangle has a height of 31 mm and an area of 263.5 mm^2. Find the base of the triangle. Hint: Draw a picture.

d. A rectangular field has a fence around it that is 280 yards around. If the field is 100 yards long, how wide is it? Hint: Draw a picture. Can you write an equation to model this?

Section 2.6 Solving One-Step Inequalities

4. To prepare for another class game, solve each inequality and graph each solution on a number line. Write the solution set in interval and set-builder notation. Make sure each person understands the process.

Solve the Inequality	Number Line Graph	Interval	Set-builder Notation
a. $x-4<-15$			
b. $-5y \le 10$			
c. $9>\frac{1}{3}t$			
d. $-9 \ge -8+x$			

5. Find a partner from a different table and introduce yourselves. Write their name in the space provided. Get ready for the first inequality to solve. You will solve each one with a different partner.

Partner	Solve the Inequality	Number Line Graph	Interval	Set-builder Notation
	a.			
	b.			
	c.			
	d.			
	e.			

More Practice

6. Solve and check each equation and write the solution set.

a. $-9+x=-1$

b. $\frac{1}{2}r=-20$

c. $-k=\frac{5}{2}$

d. $4=x-15$

7. Solve each inequality and draw the solution set on a number line. Write the solution set in interval and set-builder notation.

a. $-2+t>-1$

b. $-\frac{3}{4}y\leq\frac{5}{4}$

c. $5p\leq-20$

d. $11>x-9$