Topic 3 Review Sheet

Name _____

Period _____

1. Write the following Equation or Inequality on the Line

_____ a. The sum of a number and 5 is less than fifteen.

_____ b. A number times five equals fifteen.

_____ c. A number less seven is no less than to five.

_____ d. The difference between a number and seven is zero.

_____ e. The sum of a number and seven is at least fifteen.

_____ f. A number is at most fifteen

_____ g. Twice a number exceeds twenty.

_____ h. The sum of a number and nine no more than thirty.

2. What is the difference between an **Equation** and an **Inequality**?

_____

_____

_____

3a. $\frac{x}{9-5}=7$

3b. $45 \geq 4x+7x-2x$

5. Which situations can you represent with and equation, which can you represent with an inequality?

A. Two friends live 7 blocks apart	**Equation**	**Inequality**
B. A girl earned $26 babysitting on Saturday night	**Equation**	**Inequality**
C. Each class must have fewer than 23 students	**Equation**	**Inequality**
D. The homework took 4 hours to complete	**Equation**	**Inequality**

6. Sammy went to the store and bought cereal for c dollars, milks for 2 dollars and sugar for 5 dollars. If Sammy spent no more than 10 dollars, write, solves and graph an inequality to find the possible prices for the cereal.

Part A: Write an Inequality: _____

Part B: Solve the Inequality:

Part C: Graph the Inequality: 

Part D: Which of the following are possible prices of the cereal (Circle all that apply)

$2.99 **$3.50** **$2.79** **$3.00** **$4.25**

Topic 3 Review Sheet

Name Key

Period _____

1. Write the following Equation or Inequality on the Line

$n+5<15$	a. The sum of a number and 5 is less than fifteen.
$n \cdot 5 = 15$	b. A number times five equals fifteen.
$n-7 \geq 7$	c. A number less seven is no less than to five.
$n-7=0$	d. The difference between a number and seven is zero.
$n+7 \geq 15$	e. The sum of a number and seven is at least fifteen.
$n \leq 15$	f. A number is at most fifteen
$2n > 20$	g. Twice a number exceeds twenty.
$n+9 \leq 30$	h. The sum of a number and nine no more than thirty.

2. What is the difference between an **Equation** and an **Inequality**?

An equation has only 1 solution while an inequality has MORE THAN 1 solution.

3a. $\frac{x}{9-5} = 7$

$\frac{x}{4} \cdot 4 = 7 \cdot 4$

$x = 28$

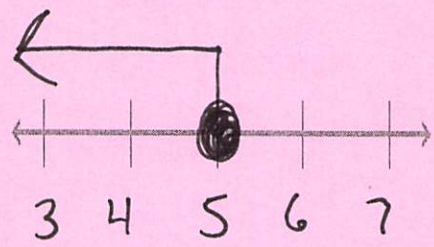
3b. $45 \geq 4x + 7x - 2x$

$45 \geq 9x$

$\div 9 \quad \div 9$

$5 \geq x$

$x \leq 5$



5. Which situations can you represent with and equation, which can you represent with an inequality?

A. Two friends live 7 blocks apart	**Equation**	**Inequality**
B. A girl earned $26 babysitting on Saturday night	**Equation**	**Inequality**
C. Each class must have fewer than 23 students	**Equation**	**Inequality**
D. The homework took 4 hours to complete	**Equation**	**Inequality**

6. Sammy went to the store and bought cereal for *c* dollars, milks for 2 dollars and sugar for 5 dollars. If Sammy spent no more than 10 dollars, write, solves and graph an inequality to find the possible prices for the cereal.

Part A: Write an Inequality: $C + 2 + 5 \leq 10$

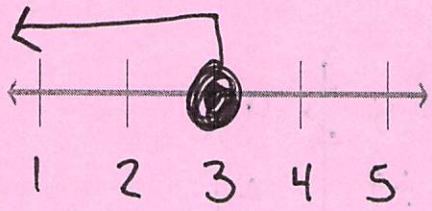
Part B: Solve the Inequality:

$C + 7 \leq 10$

$-7 \quad -7$

$C \leq 3$

Part C: Graph the Inequality:



Part D: Which of the following are possible prices of the cereal (Circle all that apply)

$2.99 $3.50 $2.79 $3.00 $4.25