Get out your homework and have it ready to check. Target Check tomorrow!

Classwork - Writinig and Solving Inequalities Practice

Arite an inequality to represent the situation. Then solve and graph the inequality.

A) Drew has a job making \$9.50 an hour. If he wants to make more than \$76, how many hours does he need to work?

B) Cedrick is having a barbeque and is making burgers. One pound of hamburger makes 4 burgers. If Cedrick needs to make at least 28 burgers, how many pounds of hamburger does he need to buy?

4P≥28 Cedrick needs

4 1 at least 7 pounds

of hamburger

C) Dale has \$25 to spend at a carnival. Admission to the carnival is \$4 and the rides cost \$1.50 each. How many

rides could Dale possibly go on?

Define variable: [= # of rides

Inequality 1.5r +4 625 1.5, € 21 up to 14 rides. r 414

Two operations acting on the variable...

-4 -4 Dale can ride

D) The 7th grade class is putting on a talent show to raise money and are selling tickets for \$10 each. It costs \$250 to rent the hall and decorate it. How many tickets do they need to sell in order to raise over \$600?

Inequality Signs

- > → Greater Than < → Less Than
- ≥ → Greater Than or Equal To
- ≤ → Less Than or Equal to

Open Circle is < or >

Closed Circle is \leq or \geq

Decide what your limit is?

-at least, at most,
no more than, no less than, etc.

Identify variable

What are you looking for?

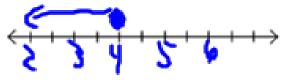
What is acting on the variable?

-multiplication, division, addition, subtraction

Write an inequality to represent the situation. Then solve and graph the inequality. Interpret your solution.

A) Ken is on a diet and does not want to consume more than 2000 calories in a day. Today Ken has already consumed food containing 1680 calories. He wants to eat some apples that contain 80 calories each. How many apples can Ken eat?

Define variable: \(\frac{\alpha}{2} = \frac{\alpha}{2} \)



Interpretation:

Ken can eat up to 4 apples

Inequality

Solution: (9 = 4 apple)

B) As a salesperson,	Audrey eams \$75	per week plus \$5	per sale. This	week, she wants	her pay to be at l	east \$140.
How many sales doe	es she need to make	to meet her goal?	?			

Define variable:	5	_	#	ર્વ	salas

Interpretation: Andrey necks to make at least 13 sales

$$75+55 \ge 140$$

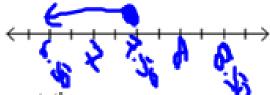
$$75+55 \ge 145$$

$$55 \ge 65$$

$$5 \ge 135$$

C) Eli and his sister went to the movies. They had \$34 altogether to spend and spent \$19 on movie tickets. Eli and his sister both want to buy snacks for the movie. If they both get the same amount to spend on snacks, how much money does each have to spend on snacks?

Define variable: M = Money on Soucks



Interpretation:

they can each spend at most &7.50

<u>Inequality</u>

Solution:

9m+19 < 34

Solution:

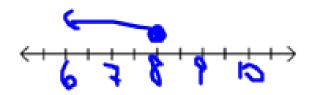
Solve and graph the following inequalities. Remember, when multiplying or dividing by a negative number to must flip the inequality symbol. SHOW WORK

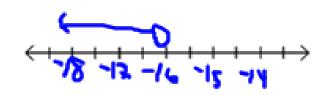
A) $4x - 12 \le 20$

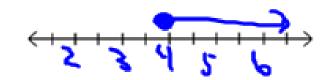
B)
$$-\frac{1}{4}x + 6 > 10$$

$$(2) 9x + 7 \ge 43$$









D)
$$-2x + 16 < 10$$
 $-16 - 16$
 $= 2 \times 4 - 6$
 $= 2 \times 4 - 6$

F)
$$\frac{2}{5}x-6>-16$$

$$+44$$

$$5 \cdot \frac{2}{5}x - 10 \cdot 5$$

$$\frac{2}{3}x > -50$$

$$\frac{2}{3}x > -30$$

$$\frac{2}{3}x > -30$$

