Activity: Let's be Thankful for Inequalities

Name: Key

Nov. 20 glue on page 23

Created for you by Ms. Nhotsoubanh

1. Pet Supplies makes a profit of $5.50 per bag on its line of natural dog food. If the store wants to make a profit of no less than $5225, how many bags of dog food does it need to sell?

Let x = # of bags

$\frac{5.50x}{5.50} \geq \frac{5225}{5.50}$

$x \geq 950$

They need to sell 950 bags.

2. Jordan has $500 in her bank account. Every week, she **withdraws** $40 for expenses. Without making any deposits, how many weeks can she withdraw this money if she wants to maintain a balance of at least $200?

Let x = # of weeks

$500 - 40x \geq 200$

$-500 \quad -500$

$\frac{-40x}{-40} \geq \frac{-300}{-40}$

$x \leq 7.5$

Jordan can withdraw money for 7 weeks.

3. Frankie went to the carnival with $22.50. He bought a hot dog and a drink for $3.75, and he wanted to spend the rest of his money on ride tickets which cost $1.25 each. What is the maximum number of ride tickets that he can buy?

Let x = # of rides

$3.75 + 1.25x \leq 22.50$

$-3.75 \quad -3.75$

$1.25x \leq 18.75$

$\frac{1.25x}{1.25} \leq \frac{18.75}{1.25}$

$x \leq 15$

The maximum of 15 rides.

Directions: Solve for the evens inequality problems from "Why was professor clabberhead utterbunk holding up a piece of bread?" on pages 24 & 25.

HW: finish the activity and study for your test.
Look over:
Number word problems ..... pages 72-74
Perimeter word problems .... pages 77-79
Real World word problems.... pages 86-89
Consecutive integers word problems....pages 3-8 new book

also look over old stuff
decimal equations
fractional equations

Why Was Professor Clabberhead Utterbunk Holding Up a Piece of Bread ?

Solve each inequality below. In the answer column, find the inequality that describes the solution set and notice the letter next to it. Print this letter in each box at the bottom of the page that contains the number of that exercise.

(1) $5x + 2 > 3x + 10$	(L) $n \geq 5$
(2) $8 + 2x \leq 6x - 20$	(G) $n \geq -6$
(3) $4x + 49 < 9 - x$	(A) $x < -8$
(4) $9x - 99 \geq 18x$	(O) $n < -3$
(5) $3(x - 4) > 15$	(R) $x > 4$
(6) $28 < 4(5 - 2x)$	(S) $x < -1$
(7) $3(2n + 1) \geq 4n + 9$	(U) $x < 10$
(8) $3n - 10 \leq 7(2 + n)$	(I) $x \leq -11$
(9) $-4(2n - 6) < n + 6$	(P) $n \geq 1$
(10) $2(7n - 1) \geq 3(5 - n)$	(N) $x \geq 7$
(11) $7n - 2(n + 5) < 3n - 16$	(T) $n < -2$
(12) $4(1 - 3n) - 14 > 4(2n + 3) - 9n$	(E) $n \geq 3$
	(W) $n > 2$
	(M) $n < -5$
	(H) $x > 9$

5	7	9	3	6	10	1	11	10	11	6	4	2	8	3	12	11	3	6	12
				S	P			P		S	I	N	G		T			S	T