Name _____ Date _____ Class _____

Writing Two-Step Inequalities

Practice and Problem Solving: D

Write an inequality for each phrase. The first one is done for you.

1. Four times a number is at least 2.

   _____$4x \geq 2$_____

2. One third of the opposite of a number is less than 12.

   _____

3. A number increased by 5 is less than 7.

   _____

4. Ten less than a number is more than 30.

   _____

5. Two more than 5 times a number is greater than or equal to 3.

   _____

6. Six less than two times a number is no more than 17.

   _____

Write an inequality for each situation. Show your work. The first one is done for you.

7. An employee of a car wash earns $12 for each car she washes. She always saves $50 of her weekly earnings. This week, she wants to have at least $100 in spending money. What is the fewest number of cars she must wash?

   Twelve times the number of cars she washes minus $50 for her savings must be

   greater than or equal to $100. Twelve times the number of cars, *n*, is 12*n*. Subtract

   $50 for her savings: 12*n* – 50. This has to be at least $100, so 12*n* – 50 $\geq$ 100.

8. A video-game enthusiast saved $750 to spend on a video game player and games. The player costs $400. The games cost $49 each. At most, how many games can the enthusiast buy along with the player?

   _____

   _____

9. A health-food producer has 250 samples of a new snack to distribute in the mall. The producer has to keep at least 50 samples for display in the health-food store for the product launch. How long will the samples last if consumers are taking the samples at a rate of 25 every hour?

   _____

   _____