NAME   DATE   PERIOD

Unit 6, Lesson 13
Practice Problems

1. For each inequality, find two values for x that make the inequality true and two values that make it false.

   a. $x + 3 > 70$

   b. $x + 3 < 70$

   c. $-5x < 2$

   d. $5x < 2$

2. Here is an inequality: $-3x > 18$.

   a. List some values for x that would make this inequality true.

   b. How are the solutions to the inequality $-3x \geq 18$ different from the solutions to $-3x > 18$? Explain your reasoning.

3. Match each sentence with the inequality that could represent the situation.

   A. Han got $2 from Clare, but still has less than $20.

   B. Mai spent $2 and has less than $20.

   C. If Tyler had twice the amount of money he has, he would have less than $20.

   D. If Priya had half the money she has, she would have less than $20.

   1. $x - 2 < 20$

   2. $2x < 20$

   3. $x + 2 < 20$

   4. $\frac{1}{2}x < 20$

4. Here are the prices for cheese pizza at a certain pizzeria:

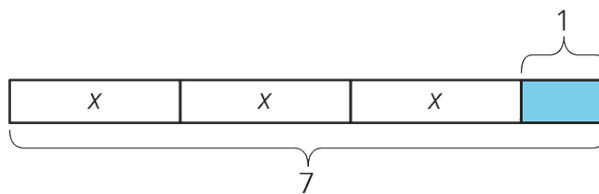| pizza size	price in dollars
small	11.60

pizza size	price in dollars
medium	
large	16.25

a. You had a coupon that made the price of a large pizza $13.00. For what percent off was the coupon?

b. Your friend purchased a medium pizza for $10.31 with a 30% off coupon. What is the price of a medium pizza without a coupon?

c. Your friend has a 15% off coupon and $10. What is the largest pizza that your friend can afford, and how much money will be left over after the purchase?

5. Select **all** the stories that can be represented by the diagram.

A. Andre studies 7 hours this week for end-of-year exams. He spends 1 hour on English and an equal number of hours each on math, science, and history.

B. Lin spends $3 on 7 markers and a $1 pen.

C. Diego spends $1 on 7 stickers and 3 marbles.

D. Noah shares 7 grapes with 3 friends. He eats 1 and gives each friend the same number of grapes.

E. Elena spends $7 on 3 notebooks and a $1 pen.