NAME DATE PERIOD

Unit 6, Lesson 13: Reintroducing Inequalities

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 $-3x \ge 18$ different from the solutions to -3x > 18? Explain your reasoning.

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

$$1. x - 2 < 20$$

3.
$$x + 2 < 20$$

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

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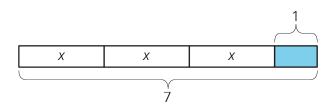
4. Here are the prices for cheese pizza at a certain pizzeria:

pizza size	price in dollars
small	11.60
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?

(from Unit 4, Lesson 12)

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.

(from Unit 6, Lesson 4)