

## Lesson 4 Practice Problems

1. The solution to  $5 - 3x > 35$  is either  $x > -10$  or  $-10 > x$ . Which solution is correct? Explain how you know.

2. The school band director determined from past experience that if they charge  $t$  dollars for a ticket to the concert, they can expect attendance of  $1000 - 50t$ . The director used this model to figure out that the ticket price needs to be \$8 or greater in order for at least 600 to attend. Do you agree with this claim? Why or why not?

3. Which inequality is true when the value of  $x$  is  $-3$ ?

A.  $-x - 6 < -3.5$

B.  $-x - 6 > 3.5$

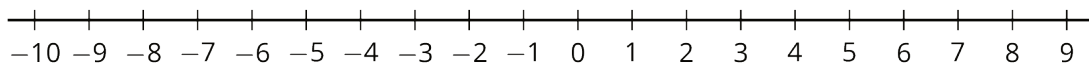
C.  $-x - 6 > -3.5$

D.  $x - 6 > -3.5$

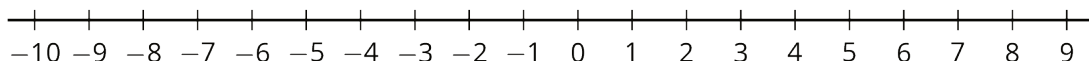
(From Unit 4, Lesson 3.)

4. Draw the solution set for each of the following inequalities.

a.  $x \leq 5$

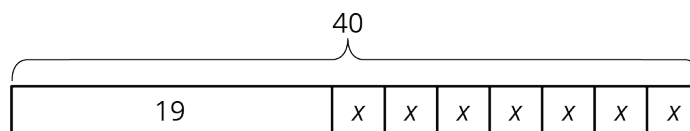


b.  $x < \frac{5}{2}$



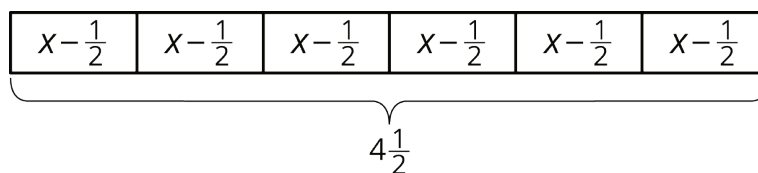
(From Unit 4, Lesson 3.)

5. Write three different equations that match the tape diagram.



(From Unit 3, Lesson 3.)

6. A baker wants to reduce the amount of sugar in his cake recipes. He decides to reduce the amount used in 1 cake by  $\frac{1}{2}$  cup. He then uses  $4\frac{1}{2}$  cups of sugar to bake 6 cakes.



a. Describe how the tape diagram represents the story.

b. How much sugar was originally in each cake recipe?

(From Unit 3, Lesson 2.)