

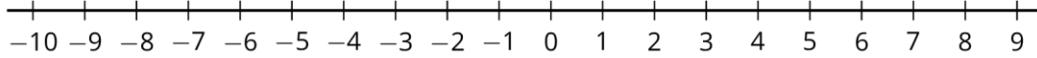
Math 7 Period \_\_\_\_\_  
7.6.14 Homework Set

Name \_\_\_\_\_  
Date \_\_\_\_\_

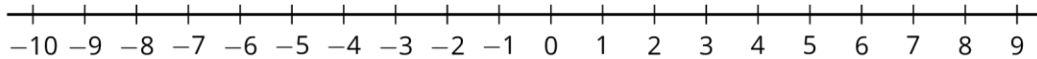
1. The solution to  $5 - 3x > 35$  is either  $x > -10$  or  $-10 > x$ . Which solution is correct? Explain how you know.
  
  
  
  
  
  
  
  
  
  
2. The school band director determined from past experience that if they charge  $t$  dollars for a ticket to the concert, they can expect attendance 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? (from Unit 6, Lesson 13)
  - a.  $-x - 6 < -3.5$
  - b.  $-x - 6 > 3.5$
  - c.  $-x - 6 > -3.5$
  - d.  $x - 6 > -3.5$

4. Draw the solution set for each of the following inequalities. (from Unit 6, Lesson 13)

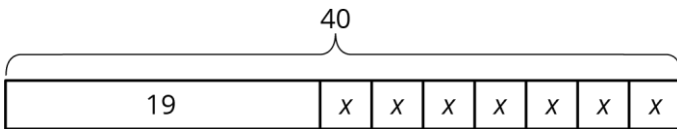
A.  $x \leq 5$



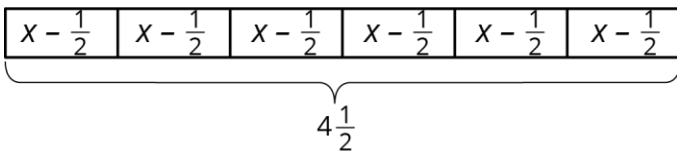
B.  $x < \frac{5}{2}$



5. Write an equation that matches the tape diagram. (from Unit 6, 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. (from Unit 6, Lesson 2)



A. Describe how the tape diagram represents the story.

B. Solve the equation to show how much sugar was originally in each cake recipe?