Name _____ Date _____

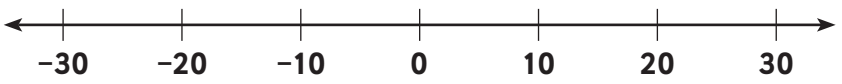
Skills Maintenance

Inequalities

Activity 1

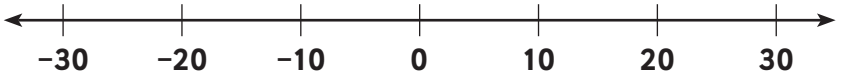
Show the range of values on the number lines that make the inequality true.

1. $x \leq 0$

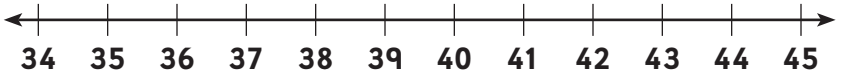


2. $b < 293$

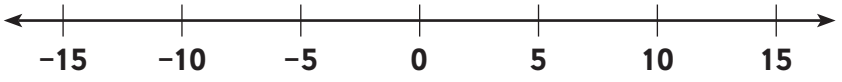
3. $a \geq -10$



4. $a \geq 39$



5. $c > -5$



Name _____ Date _____

Apply Skills

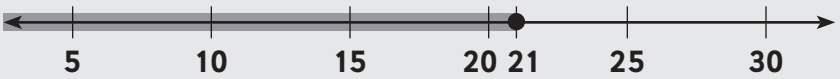
Translating Inequalities Using > and <

Activity 1

Read each word problem. Choose a variable for the inequality. Write the inequality, then graph it on a number line.

Model

Blake has a younger sister. Blake is 21.
The variable *s* represents the sister's age.
The inequality is $s < 21$.



1. Todd has an older sister who is 16.

   The variable _____ represents _____ .

   The inequality is _____ .

2. Bev is in a higher grade at school than Billy. Billy is in the third grade.

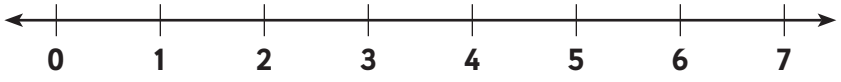
   The variable _____ represents _____ .

   The inequality is _____ .

3. Bob is taller than Bud. Bud is 6 feet tall.

   The variable _____ represents _____ .

   The inequality is _____ .



4. Kyle has more CDs than his sister. His sister has 10 CDs.

   The variable _____ represents _____ .

   The inequality is _____ .

Name _____ Date _____

Activity 2

Select the best inequality for each word statement.

1. Becca scored more points than Patty. Patty scored 10 points.
   If b = Becca's score:
   - **(a)** $b > 10$
   - **(b)** $b < 10$
   - **(c)** $10 > b$

2. Tom got a 95 on the quiz. Ted got a higher score than Tom.
   If x = Ted's score:
   - **(a)** $95 > x$
   - **(b)** $x < 95$
   - **(c)** $x > 95$

3. Lynda is older than Suzy. Lynda is 15.
   If y is Suzy's age:
   - **(a)** $y > 15$
   - **(b)** $y < 15$
   - **(c)** $15 < y$

4. The temperature rose above 40.
   If t is the temperature:
   - **(a)** $t > 40$
   - **(b)** $40 > t$
   - **(c)** $t < 40$

Name _____ Date _____

Problem-Solving Activity

Decreasing and Increasing Rates

Read each word problem. Then write a rate proportion with a variable to solve the problem. Remember to think about what you are multiplying by when you solve the proportion.

1. If Bobbi can run 4 miles in an hour, how long does it take her to run 1 mile?

_____

2. Elizabeth likes to read. She prides herself on being able to read 240 pages in 2 hours. How long does it take Elizabeth to read 60 pages?

_____

3. The captain of the soccer team scored 24 goals in 6 games. At this rate, how many goals does he score per game?

_____

4. If it takes you 6 hours to drive 360 miles, how many miles can you drive in an hour?

_____

Reinforce Understanding
Use the **mBook** ***Study Guide*** to review lesson concepts.