

# 7.5 Exercises



## Vocabulary and Concept Check

1. **VOCABULARY** How are *greater than* and *greater than or equal to* similar? How are they different?

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2. **DIFFERENT WORDS, SAME QUESTION** Which is different? Write “both” inequalities.

A number  $n$  is at most 3.

A number  $n$  is at least 3.

A number  $n$  is less than or equal to 3.

A number  $n$  is no more than 3.

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3. **WRITING** Explain how the graph of  $x \leq 6$  is different from the graph of  $x < 6$ .

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4. **WRITING** Are the graphs of  $x \leq 5$  and  $5 \geq x$  the same or different? Explain.

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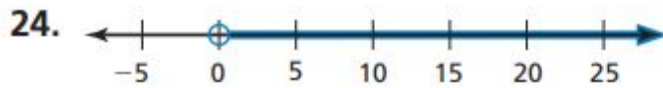
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**Write an inequality and a word sentence that represent the graph.**



Inequality: \_\_\_\_\_

Word sentence: \_\_\_\_\_



Inequality: \_\_\_\_\_

Word Sentence: \_\_\_\_\_

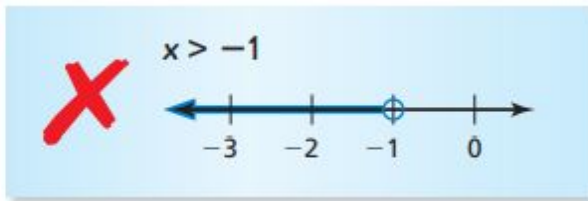
**Graph the inequality on a number line.**

30.  $-3 \geq c$

34.  $t \geq -\frac{1}{2}$

**ERROR ANALYSIS** Describe and correct the error in graphing the inequality.

38.



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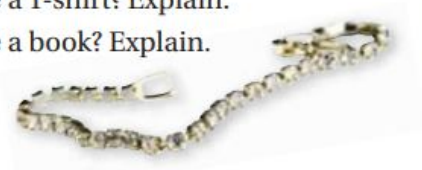
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41. **SHOPPING** You have \$33. You want to buy a necklace and one other item from the list.

- a. Write an inequality to represent the situation.
- b. Can the other item be a T-shirt? Explain.
- c. Can the other item be a book? Explain.

Item	Price (with tax)
T-shirt	\$ 15
Book	\$ 20
DVD	\$ 13
Necklace	\$ 16



a. \_\_\_\_\_

b. \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

c. \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

44. **BUS RIDE** A bus ride costs \$1.50. A 30-day bus pass costs \$36. Write an inequality to represent the number of bus rides you would need to take for the bus pass to be a better deal.
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45. **MOVIE THEATER** Fifty people are seated in a movie theater. The maximum capacity of the theater is 425 people. Write an inequality to represent the number of additional people who can still be seated.
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