Name _____

Key Concept and Vocabulary

$x > 2$: All numbers greater than 2

$x \geq 2$: All numbers greater than or equal to 2

$x < 2$: All numbers less than 2

$x \leq 2$: All numbers less than or equal to 2

Visual Model

$x > 2$

$x \geq 2$
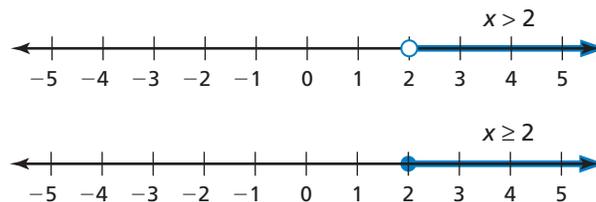
Skill Examples

1. $x > 0$: All positive numbers

2. $x \geq 0$: All nonnegative numbers

3. $x < 0$: All negative numbers

4. $x \leq 0$: All nonpositive numbers

Application Example

5. A sign at a clothing store reads "Savings up to 70%." Let S represent the percent of savings. Write an inequality to describe S.

S can be equal to 70%.

Or S can be less than 70%.

⋰ An inequality is $S \leq 70\%$.

PRACTICE MAKES *PURR*-FECT™

Write an inequality for the statement.

6. All numbers that are less than 24

_____

7. All numbers that are at most 3

_____

8. All numbers greater than 10

_____

9. All numbers that are no more than 5

_____

10. All numbers that are at least 11

_____

11. All numbers less than or equal to 8

_____

**Graph the inequality.**

12. $x > -1$

13. $x < 4$

14. $x \leq 3$

15. $x \geq 0$
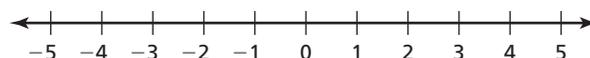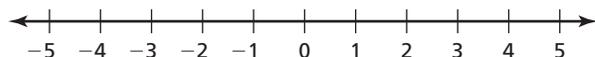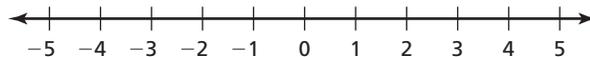
16. A sign at a shoe store reads "Savings up to 60%." Let P represent the percent of savings. Write an inequality to describe P.

_____

$45

Shoe Sale
$65
Savings up to 60%