Name _____ Core _____ Date _____

7.6 Exercises

Check It Out
Help with Homework
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Vocabulary and Concept Check

1. **OPEN-ENDED** Write an inequality that can be solved by subtracting 7 from each side.

_____

2. **WRITING** Explain how to solve the inequality $x - 6 > 3$.

_____

3. **WRITING** Describe the graph of the solution of $x + 3 \leq 4$.

_____

_____

_____

4. **OPEN-ENDED** Write an inequality that the graph represents. Then use the Subtraction Property of Inequality to write another inequality that the graph represents.

Inequality: _____

Another inequality: _____

Practice and Problem Solving

Solve the inequality. Graph the solution.

8. $9 \leq c + 1$ Solution: _____

Graph:

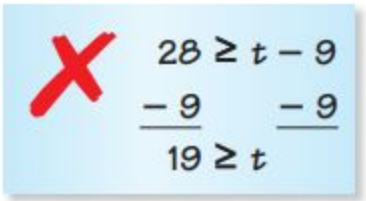
10. $37 + z \leq 54$ Solution: _____

Graph:

12. $g - 17 \geq 17$ Solution: _____

Graph:

17. ERROR ANALYSIS Describe and correct the error in solving the inequality.



_____

_____

Write the word sentence as an inequality. Then solve the inequality.

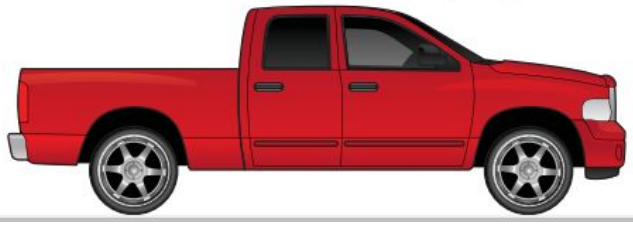
20. Five more than a number is less than 17.

Inequality: _____

Solution: _____

26. **PICKUP TRUCKS** You can register a pickup truck as a passenger vehicle if the truck is not used for commercial purposes and the weight of the truck with its contents does not exceed 8500 pounds.

a. Your pickup truck weighs 4200 pounds. Write an inequality to represent the number of pounds your truck can carry and still qualify as a passenger vehicle. Then solve the inequality.



b. A cubic yard of sand weighs about 1600 pounds. How many cubic yards of sand can you haul in your truck and still qualify as a passenger vehicle? Explain your reasoning.

a. Inequality: _____

b. _____

_____

_____

_____

28. Number Sense The possible values of x are given by $x - 3 \geq 2$. What is the least possible value of $5x$?

_____

Fair Game Review What you learned in previous grades & lessons

Solve the equation. Check your solution. *(Section 7.3)*

29. $\frac{t}{12} = 4$ **30.** $6 = \frac{2s}{9}$ **31.** $8x = 72$ **32.** $9 = 1.5z$

33. MULTIPLE CHOICE Which brand of turkey is the best buy? *(Section 5.4)*

(A) Brand A (B) Brand B

(C) Brand C (D) Brand D

Brand	A	B	C	D
Cost (dollars)	10.38	13.47	21.45	34.93
Pounds	2	3	5	7

29. Solution: _____ Check: _____

30. Solution: _____ Check: _____

31. Solution: _____ Check: _____

32. Solution: _____ Check: _____