Name_____ Date_____ Class_____
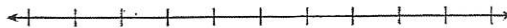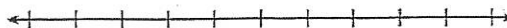
Practice B
Solving Inequalities by Adding or Subtracting

Solve. Then graph each solution set on a number line.
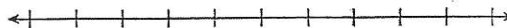
1. $y - 5 > -2$ _____

2. $n + 5 \leq 11$ _____
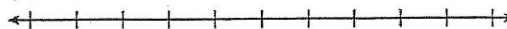
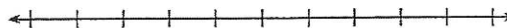3. $x + 4 < -1$ _____

4. $h + 20 > 2$ _____

5. $p + 9 \geq -3$ _____

6. $s - 7 < -16$ _____
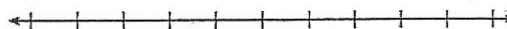
Solve. Check each answer.

7. $41 + g > 27$

8. $w + 23 \geq -18$

9. $a + 15 \leq 9$

10. $z + 27 < 16$

11. $-3 \leq t + 17$

12. $78 \geq b + 64$

13. In order for a field trip to be scheduled, at least 30 students must sign up. So far, 23 students have signed up. At least how many more students must sign up in order for the field trip to be scheduled?

_____

Holt McDougal Mathematics

| LESSON 12-5 | Problem Solving
Solving Inequalities by Adding or Subtracting |

Write the correct answer.

1. A small car averages up to 29 more miles per gallon of gas than an SUV. If a small car averages 44 miles per gallon, what is the average miles per gallon for an SUV?

_____

2. Carlos is taking a car trip that is more than 240 miles, depending on the route he chooses. He has already driven 135 miles. How much farther does he have to go?

_____

3. Driving into the city usually takes 25 minutes. If there is a lot of traffic, the trip can take up to 45 minutes. How much additional time should you allow during a heavy traffic period?

_____

4. To qualify for the heavyweight wrestling division, Kobe must weigh at least 180 pounds. If Kobe weighs 168 pounds now, how much weight should he gain?

_____

Choose the letter for the best answer.

5. On one day, the range of temperatures in one state was at most 27°. If the lowest temperature in the state was 59°, what was the highest temperature?

   A $t > 86°$

   B $t \leq 86°$

   C $t = 86°$

   D $t \geq 86°$

6. The highest possible score on the Scholastic Aptitude Test is 2,400. Rebecca scored 1,780. She needs a score of at least 1,950 to qualify for a scholarship. How much higher must her score be?

   F $s \leq 170$

   G $s \leq 450$

   H $s \geq 170$

   J $s \geq 450$

7. Romero is saving to buy an Apex Model 12 Computer. The lowest price that Romero can find for the computer is $1,250. Romero now has $825. His grandmother is going to give him another $200. How much more money does Romero need?

   A $x < 225

   B $x < 425

   C $x \geq 225

   D $x \geq 425

8. The seating capacity of the school gym is 550. So far, there are 210 fans at a basketball game. How many more fans could attend the game?

   F $f \geq 340$

   G $f > 210$

   H $f \leq 340$

   J $f < 340$

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