Name_____ Date _____

2.2 Practice B

In Exercises 1–9, solve the inequality. Graph the solution.

1. $w + 6 \leq 2$

2. $m - 3 > -6$

3. $4 < 4 + s$

4. $7 \leq x + 15$

5. $p - (-3) > 10$

6. $q + 6 - 5 > 4$

7. $3 - 11 + t > -2$

8. $4 \leq 6a - 4a - 2$

9. $22 + (-9c) + 10c < 5 + 1$

In Exercises 10–13, write the sentence as an inequality. Then solve the inequality.

10. A number plus 10 is less than 34.

11. A number minus 8 is at least 14.

12. The sum of a number and 7 is less than 15.

13. Nine is less than or equal to the difference of a number and 1.

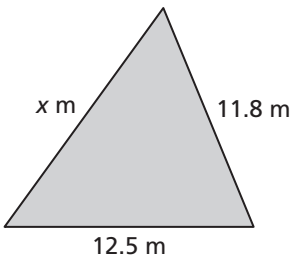
14. You order a new pair of running shoes from a website that offers free shipping on orders of $75 or more. Your shoes cost $69.95.

a. Write and solve an inequality that represents how much more you must spend to get free shipping.

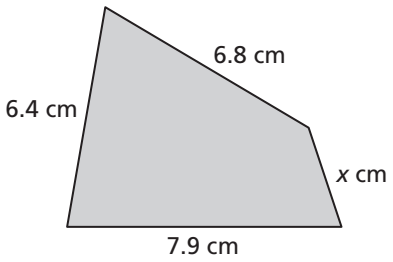
b. The cost of shipping your shoes is $7.79. Would you purchase another item in order to get free shipping? Explain.

In Exercises 15 and 16, write and solve an inequality to find the possible values of *x*.

15. Perimeter < 37.8 meters



16. Perimeter ≤ 24.1 centimeters



17. Write and solve an inequality that represents the numbers that are *not* solutions of each inequality.

a. $x - 7 \leq -10$

b. $x + 3 > 2.5$