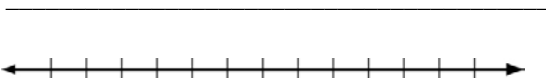


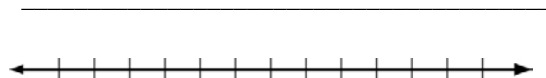
LESSON
2-7**Practice C****Solving Absolute-Value Inequalities**

Solve each inequality and graph the solutions.

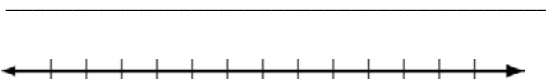
1. $|x| - 7 < -4$



2. $|x - 3| + 0.7 < 2.7$



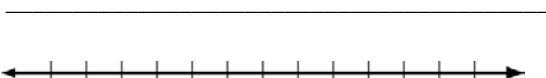
3. $\frac{1}{3}|x + 2| \leq 1$



4. $|x - 5| - 3 > 1$



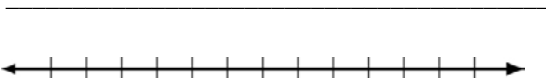
5. $|5x| \geq 15$



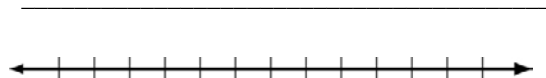
6. $\left|x + \frac{1}{2}\right| - 2 \geq 2$



7. $|x - 2| + 7 \geq 3$



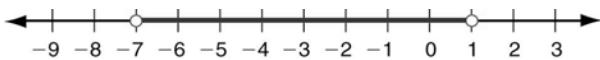
8. $4|x - 6| \geq -8$



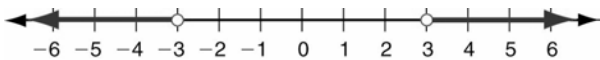
9. The ideal temperature for a refrigerator is 36.5°F . It is acceptable for the temperature to differ from this value by at most 1.5°F . Write and solve an absolute-value inequality to find the range of acceptable temperatures.
-

10. At a trout farm, most of the trout have a length of 23.5 cm . The length of some of the trout differs from this by as much as 2.1 cm . Write and solve an absolute-value inequality to find the range of lengths of the trout.
-

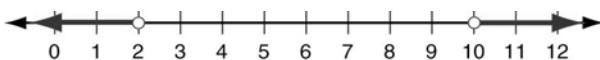
4. $x > -7$ AND $x < 1$



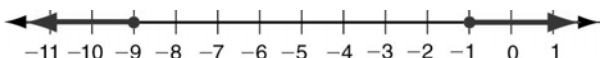
5. $x < -3$ OR $x > 3$



6. $x < 2$ OR $x > 10$



7. $x \leq -9$ OR $x \geq -1$



8. $x \leq 0.5$ OR $x \geq 3.5$



9. $|x - 350| \leq 35$; $315 \leq x \leq 385$

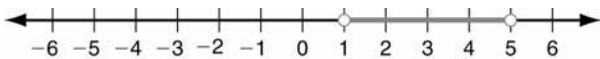
10. $|x - 88| \leq 7.5$; $80.5 \leq x \leq 95.5$

Practice C

1. $x > -3$ AND $x < 3$



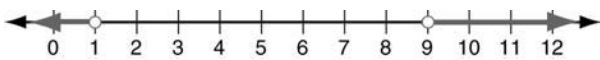
2. $x > 1$ AND $x < 5$



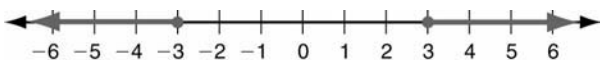
3. $x \geq -5$ AND $x \leq 1$



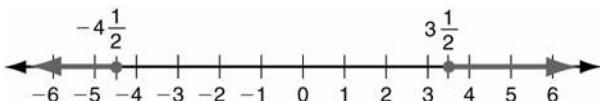
4. $x < 1$ OR $x > 9$



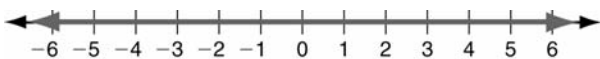
5. $x \leq -3$ OR $x \geq 3$



6. $x \leq -4\frac{1}{2}$ OR $x \geq 3\frac{1}{2}$



7. all real numbers



8. all real numbers

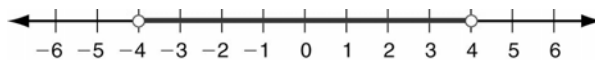


9. $|x - 36.5| \leq 1.5$; $35 \leq x \leq 38$

10. $|x - 23.5| \leq 2.1$; $21.4 \leq x \leq 25.6$

Review for Mastery

1. $x > -4$ AND $x < 4$



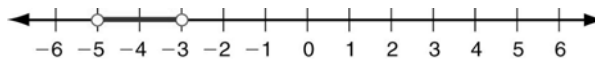
2. $x \geq -3$ AND $x \leq 5$



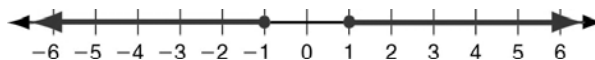
3. $x \geq -3$ AND $x \leq 3$



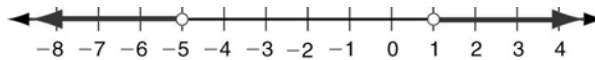
4. $x > -5$ AND $x < -3$



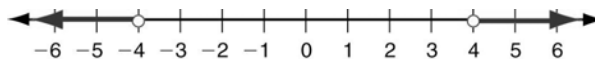
5. $x \leq -1$ OR $x \geq 1$



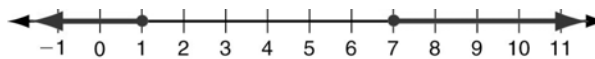
6. $x < -5$ OR $x > 1$



7. $x < -4$ OR $x > 4$

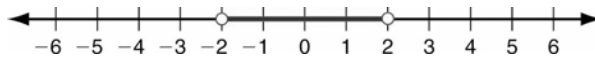


8. $x \leq 1$ OR $x \geq 7$

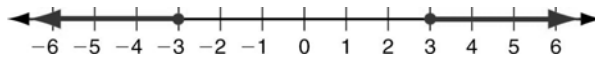


Challenge

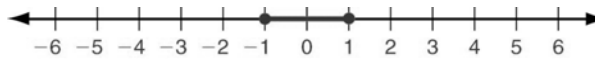
1. $3|x| < 6$; $|x| < 2$; $x > -2$ AND $x < 2$



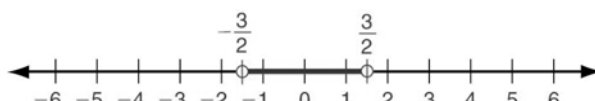
2. $9|x| \geq 27$; $|x| \geq 3$; $x \leq -3$ OR $x \geq 3$



3. $x \geq -1$ AND $x \leq 1$



4. $x > -\frac{3}{2}$ AND $x < \frac{3}{2}$



5. $x < -3$ OR $x > 1$

