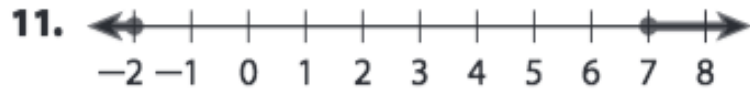
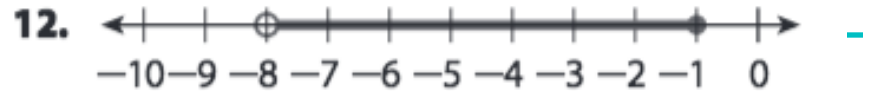


pg. 89 (11-23)

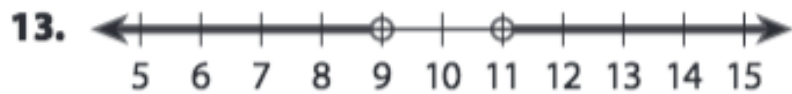


$$x \leq -2 \text{ OR } x \geq 7$$

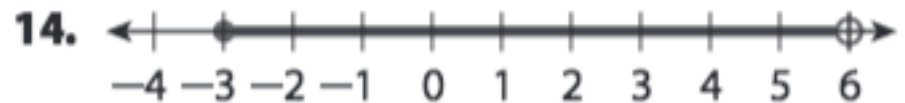
$-2 \geq x$



$$-8 < x \leq -1$$



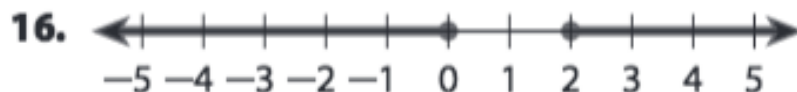
$$x < 9 \text{ OR } x > 11$$



$$-3 \leq x < 6$$

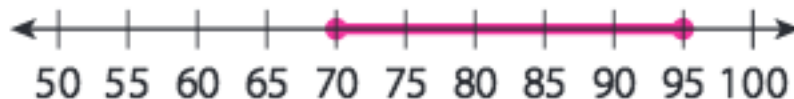


$$2 < x < 10$$



$$x \leq 0 \text{ OR } x \geq 2$$

17. **Biology** An iguana needs to live in a warm environment. The temperature in a pet iguana's cage should be between 70 °F and 95 °F, inclusive.



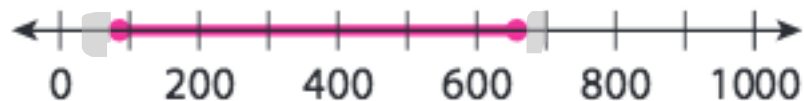
$$70 \leq t \leq 95$$

18. **Meteorology** One layer of Earth's atmosphere is called the stratosphere. At one point above Earth's surface, the stratosphere extends from an altitude of 16 kilometers to an altitude of 50 kilometers.



$$16 \leq k \leq 50$$

- 19. Music** A typical acoustic guitar has a range of three octaves. When the guitar is tuned to “concert pitch,” the range of frequencies for those three octaves is between 82.4 Hertz and 659.2 Hertz inclusive.



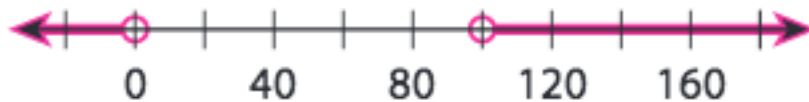
$$82.4 \leq f \leq 659.2$$

- 20. Transportation** The cruise-control function on Georgina’s car should keep the speed of the car within 3 miles per hour of the set speed. The set speed is 55 miles per hour.



$$52 \leq s \leq 58$$

- 21. Chemistry** Water is not a liquid if its temperature is above 100 °C or below 0 °C.



$$x < 0 \text{ or } x > 100$$

22. **Sports** The ball used in a soccer game may not weigh more than 16 ounces or less than 14 ounces at the start of the match. After 1.5 ounces of air were added to a ball, the ball was approved for use in a game.



$$12.5 \leq w \leq 14.5$$

$$14 \leq w + 1.5 \leq 16$$

$$-1.5 \quad -1.5 \quad -1.5$$

$$12.5 \leq w \leq 14.5$$

23. Match the compound inequalities with the graphs of their solutions.

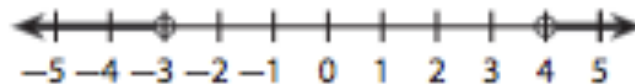
A. $-26 < 6x - 8 < 16$
 $-18 < 6x < 24$
 $-3 < x < 4$

B. $-\frac{1}{3} \leq \frac{x+2}{3} \leq 2$
 $-1 \leq x+2 \leq 6$
 $-3 \leq x \leq 4$

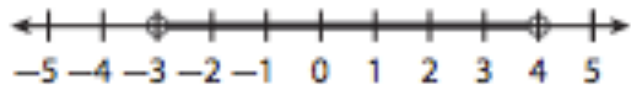
C. $4x + 1 < -11$ OR $\frac{x}{2} - 5 > -3$
 $4x < -12$ $\frac{x}{2} > 2$
 $x < -3$ $x > 4$

D. $\frac{x-6}{3} \leq -3$ OR $2x + 8 \geq 16$
 $x - 6 \leq -9$ $2x \geq 8$
 $x \leq -3$ $x \geq 4$

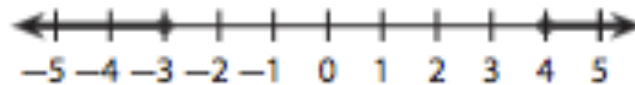
C



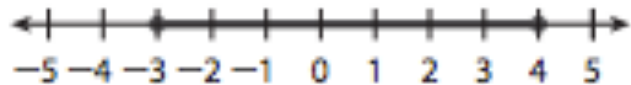
A



D



B



Return of the Quizzes



Solve and graph

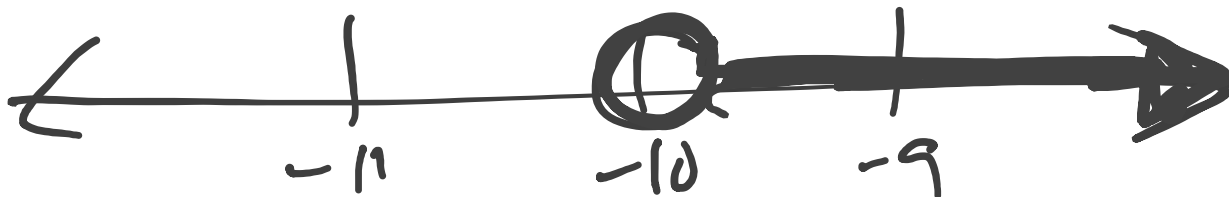
$$8\left(\frac{1}{4}x - 3\right) + 24 < 4(x + 5)$$

$$2x < 4x + 20$$

$$-2x < 20$$

$$-10 < x$$

$$x > -10$$



Solve the inequality.

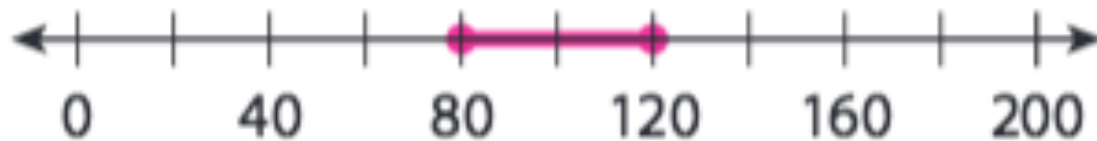
$$2(3y - 2) - 4 \geq 3(2y + 7)$$

$$6y - 8 \geq 6y + 21$$
$$-8 \geq 21$$

No solutions

1. Solve & Graph: $-10 < \frac{-5(x + 2)}{-3}$

2. Write a compound inequality:



3. Write a compound inequality:



Correct Old Homework

Pg. 78

Review Sheet



Key will be on my website