

Name _____

Date _____

Algebra 1A

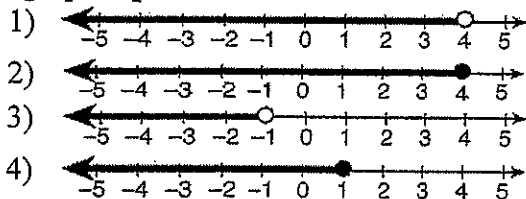
Review

1. What is the solution of the inequality $-6x - 17 \geq 8x + 25$?

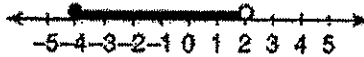
- 1) $x \geq 3$
- 2) $x \leq 3$
- 3) $x \geq -3$
- 4) $x \leq -3$

2. Solve the inequality $-5(x - 7) < 15$ algebraically for x .

3. Which graph represents the solution set of $2x - 5 < 3$?

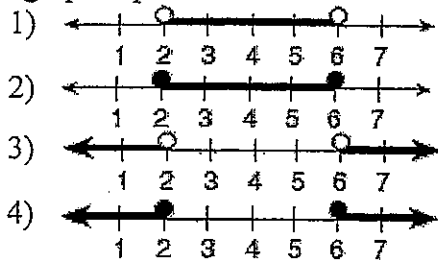


4. Which inequality is represented in the graph below?



- 1) $-4 < x < 2$
- 2) $-4 \leq x < 2$
- 3) $-4 < x \leq 2$
- 4) $-4 \leq x \leq 2$

5. Which graph represents the solution set for $2x - 4 \leq 8$ and $x + 5 \geq 7$?



6. Which value of x is in the solution set of the inequality $-2x + 5 > 17$?

- 1) -8
- 2) -6
- 3) -4
- 4) 12

11. The inequality $-2 \leq x \leq 3$ can be written as

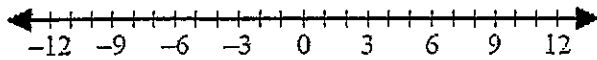
- 1) $(-2, 3)$
- 2) $[-2, 3)$
- 3) $(-2, 3]$
- 4) $[-2, 3]$

12. Which set of integers is included in $(-1, 3]$?

- 1) $\{0, 1, 2, 3\}$
- 2) $\{-1, 0, 1, 2\}$
- 3) $\{-1, 0, 1, 2, 3, 4\}$
- 4) $\{-2, -1, 0, 1, 2, 3\}$

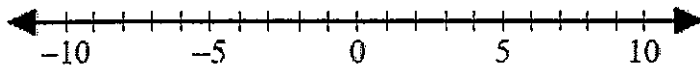
13. Solve and graph

$$x + 2 < 8$$



14. Solve and graph.

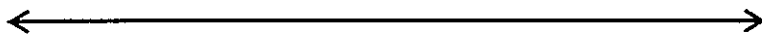
$$x + 5 \leq 7 \text{ and } -6x < 24$$



15. Write a compound inequality that represents the phrase "all real numbers that are less than -3 or greater than or equal to 5".

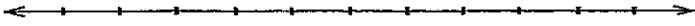
16. Solve the compound inequality and graph its solution.

$$-1 \geq -6 + p > -6$$

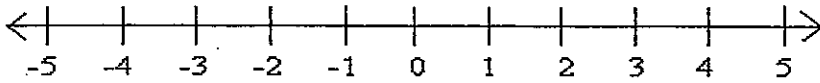


Inequality Review

Order to be admitted for a ride at an amusement park, a child must be greater than or equal to 48 inches tall and less than 60 inches tall. Graph this inequality.



Graph all real numbers that are greater than -5 and less than -3.



Name: _____

What is the solution to the inequality $x - 8 < 23$?

- A) $x < 31$ B) $x > 15$ C) $x < 15$ D) $x > 31$

2) What is the solution to the inequality $x - 18 < -13$?

- A) $x < 31$ B) $x > 31$ C) $x > 5$ D) $x < 5$

3) What is the solution to the inequality $8 - x < 23$?

- A) $x < 31$ B) $x > -15$ C) $x > 31$ D) $x < -15$

4) What is the solution to the inequality $2x - 23 \leq 19$?

- A) $x \geq 21$ B) $x \leq 21$ C) $x \geq -2$ D) $x \leq -2$

5) What is the solution to the inequality $\frac{7 - 2x}{5} < 9$?

- A) $x < 52$ B) $x > -19$ C) $x > 26$ D) \emptyset

6) How many of the following numbers are solutions to $3x - 7 < 35$?

-15, -14, 13, 14, 15

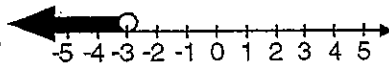
- A) 1 B) 2 C) 3 D) 4

7) How many of the following numbers are solutions to $-2x + 17 < 28$?

-12, -5, 3, 14, 15

- A) 1 B) 2 C) 3 D) 4

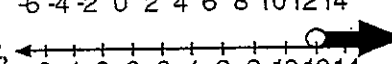
Which of the following represents the solution set and graph for the inequality $5x < 15$?

- A) $x < 3$, 
- B) $x > 3$, 
- C) $x > -3$, 
- D) $x < -3$, 

9) Which of the following represents the solution set and graph for the inequality $-8 \geq -2x$?

- A) $x \geq 4$, 
- B) $x \leq -4$, 
- C) $x \geq -4$, 
- D) $x \leq 4$, 

10) Which of the following represents the solution set and graph for the inequality $\frac{2}{3}x < 8$?

- A) $x > 5$, 
- B) $x > 12$, 
- C) $x < 12$, 
- D) $x < 5$, 

11) Which of the following represents the solution set and graph for the inequality $4x + 9 - 2x \leq 17$?

- A) $x \leq \frac{1}{3}$, 
- B) $x \leq 4$, 
- C) $x \geq \frac{1}{3}$, 
- D) $x \geq 4$, 