

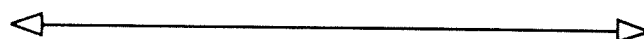
Identify which statements are true and which are false.

1.  $15 < 13 + 2$  \_\_\_\_\_      2.  $-5 \geq 6 - 10$  \_\_\_\_\_  
 3.  $15 > 13 + 2$  \_\_\_\_\_      4.  $-5 \leq 6 - 10$  \_\_\_\_\_

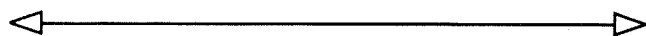
5. Graph all solutions to  $x > 4$ .



7. Graph all solutions to  $-12 \leq n < -3$ .



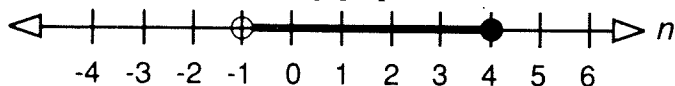
6. Graph all solutions to  $-3 \leq m$ .



8. Graph all solutions to  $5 > s > -2$ .

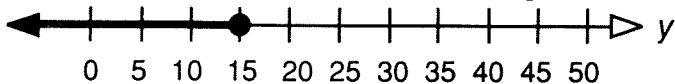


9. What inequality is being graphed here?



\_\_\_\_\_

10. The solutions to what inequality are graphed here?



\_\_\_\_\_

Algebra I  
 3.6 Warm-up  
 Inequalities

NAME: \_\_\_\_\_  
 DATE: \_\_\_\_\_ HOUR: \_\_\_\_\_

For each sentence, which mathematical expression(s) is (are) a correct description?

- |                                    |            |               |            |               |
|------------------------------------|------------|---------------|------------|---------------|
| 1. 5 is greater than 2.            | a. $2 < 5$ | b. $2 > 5$    | c. $5 > 2$ | d. $5 \geq 2$ |
| 2. $x$ is less than $y$ .          | a. $x > y$ | b. $y > x$    | c. $y < x$ | d. $x < y$    |
| 3. $x$ is less than or equal to 5. | a. $x < 5$ | b. $5 \geq x$ | c. $5 > x$ | d. $x \leq 5$ |

Tell which inequality symbol  $>$  or  $<$  will make each sentence true.

- |                   |                   |                   |
|-------------------|-------------------|-------------------|
| 1. $4 \equiv 9$   | 2. $10 \equiv 7$  | 3. $-6 \equiv -3$ |
| 4. $-2 \equiv -4$ | 5. $-5 \equiv -1$ | 6. $-8 \equiv 1$  |

Rewrite each inequality with the variable first.

- |                |                |               |
|----------------|----------------|---------------|
| 7. $4 > x$     | 8. $2 < y$     | 9. $6 \geq m$ |
| 10. $7 \leq x$ | 11. $4 \geq x$ | 12. $9 < t$   |