Vocab

A solution set is the set of all solutions of an inequality.

Example

The solution set for the example

$$x + 3 \leq 7$$

is 3 and 4.

Complete numbers 4-6 in your composition book.

Tell whether the given value is a solution of the inequality.

4) $x + 1 > 7$; $x = 8$

$8 + 1 > 7$

$9 > 7$

Yes, 8 is a solution.

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5) $7y < 27$; $y = 4$

$7(4) < 27$

$28 < 27$

No, 4 is not a solution

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6) $\frac{z}{3} \geq 5$; $z = 15$

$\frac{15}{3} \geq 5$

$5 \geq 5$

Yes, 15 is a solution.

Complete numbers 5 - 7 on your notes page.

Tell whether 3 is a solution of the inequality.

5) $b + 4 < 6$

$3 + 4 < 6$

$7 < 6$

No, 3 is not a solution.

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6) $9 - n \geq 6$

$9 - 3 \geq 6$

$6 \geq 6$

Yes, 3 is a solution.

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7) $18 \div x \leq 10$

$18 \div 3 \leq 10$

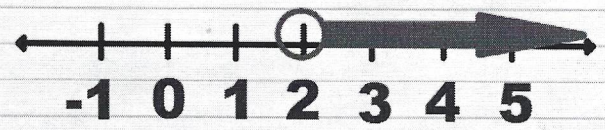
$6 \leq 10$

Yes, 3 is a solution.

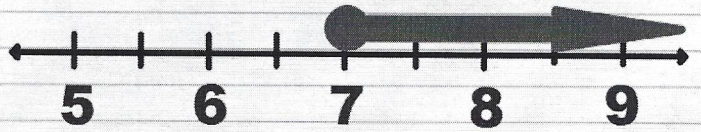
graph of an inequality	**All of the solutions of an inequality ar shown on a number line.** **Use an open circle when the number is NOT part of the solution.** **Use a closed circle when the number IS part of the solution.** **The arrow to the right or left shows that the graph continues in that direction.**

Complete numbers 4-6 in your composition book.

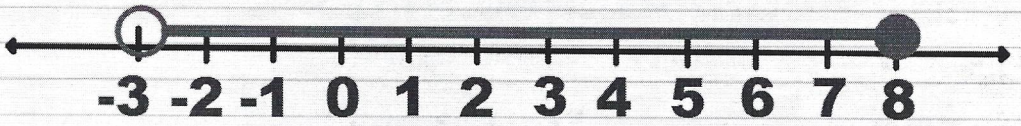
4) Graph $g > 2$



5) Graph $7 \leq f$

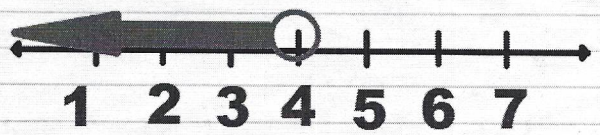


6) Graph $8 \geq p > -3$



Complete numbers 8 - 10 on your notes page.

8) Graph $a < 4$



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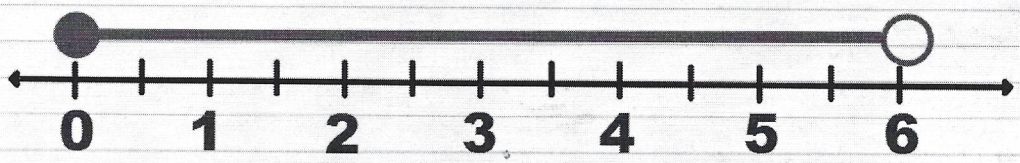
9) Graph $6 > n \geq 0$



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10) Graph $f \leq -8$