

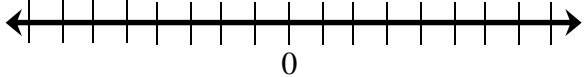
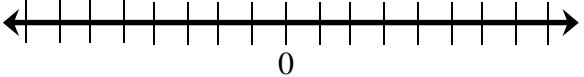
IM 3

2-1/2-2a Homework

Name: _____ Per: _____ Date: _____

Show ALL work in the space provided. DO NOT just write an answer. You must show work or justify your answer to receive full credit.

1. Solve for x . $x + 4 = -12$	2. Solve $V = lwh$ for w .
3. Is the equation <i>always, sometimes, or never</i> true? $11 + 3x - 7 = 6x + 5 - 3x$	4. Solve for y . $-27 + 6y = 3(y - 3)$
5. Solve for y . $2x + 3y = 9$	6. Solve for x . $\frac{2}{3}x + 6 = 18$
7. Solve for x . $12 - 3(2x + 1) = 7x - 3(7 + x)$	8. The length of a rectangle is 4 cm greater than its width. The perimeter is 36 cm. What are the dimensions of the rectangle?
9. Write an inequality to represent the sentence "5 fewer than a number is at least 12."	10. Write an inequality to represent the sentence "The quotient of a number and 3 is no more than 15."

<p>11. Write the four inequality symbols and their definitions.</p>	<p>12. Which inequalities are open? Which inequalities are closed?</p>
<p>13. Graph $x \leq -3$ on the number line below.</p> 	<p>14. Graph $x > -5$ on the number line below.</p> 
<p>15. Solve for x. $-3(2x-5)+1 \geq 4$</p>	<p>16. Solve for n. $4(n-4)-6 > 22$</p>
<p>17. A movie rental company offers two subscription plans. You can pay \$26 a month and rent as many movies as desired, or you can pay \$15 a month and \$1.50 to rent each movie. How many movies must you rent in a month for the first plan to cost less than the second plan.</p>	<p>18. Is the inequality <i>always</i>, <i>sometimes</i>, or <i>never</i> true? $5(2x-3)-7x \leq 3x+8$</p>