

























Lesson 16: Solving Multi-Step Inequalities with Variables on Both Sides

Directions: Solve each inequality and use a pencil to DRAW the object that corresponds with your answer. SHOW YOUR STEPS!!!

<p>1. $2x + 5 > 3x + 1$</p>	<p>(a) If your answer is $x < 4$ draw the following hat.</p>  <p>(b) If your answer is $x > -2$ draw the following hat.</p> 	<p>2. $2(x+1) < x+3$</p>	<p>(a) If your answer is $x < -1$ draw the following ears.</p>  <p>(b) If your answer is $x < 1$ draw the following ears.</p> 
<p>4. $-2(3-x) \geq x-1$</p>	<p>(a) If your answer is $x \geq 5$ draw the following patches of hair.</p>  <p>(b) If your answer is $x \geq 7$ draw the following patches of hair.</p> 	<p>3. $2x-1 \geq \frac{1}{2}(2x+6)$</p>	<p>(a) If your answer is $x \geq 7$ draw the following lines inside the ears.</p>  <p>(b) If your answer is $x \geq 4$ draw the following lines inside the ears.</p> 
<p>7. $3(2-x) \leq 4+x$</p>	<p>(a) If your answer is $x \geq \frac{1}{2}$ draw the following checks.</p>  <p>(b) If your answer is $x \geq -2$ draw the following checks.</p> 	<p>5. $x+3 < -x-1$</p>	<p>(a) If your answer is $x < -2$ draw the following LARKE eyes.</p>  <p>(b) If your answer is $x \geq 2$ draw the following LARGE eyes.</p> 
<p>10. $\frac{3}{2}(2x-4) < x-2$</p>	<p>(a) If your answer is $x > -2$ draw the following chin.</p>  <p>(b) If your answer is $x > -4$ draw the following chin.</p> 	<p>6. $7x+6 > 5x-10$</p>	<p>(a) If your answer is $x > -16$ draw the following nose, mustache, and mouth.</p>  <p>(b) If your answer is $x > -8$ draw the following nose, mustache, and mouth.</p> 
<p>11. $x-4 \leq 4-x$</p>	<p>(a) If your answer is $x \leq 0$ draw wavy vertical lines in the background. Space them 1 inch apart.</p>  <p>(b) If your answer is $x \leq 4$ draw straight vertical lines in the background. Space them 1 inch apart.</p> 	<p>9. $2(3-x) + 2 \leq 2-x$</p>	<p>(a) If your answer is $x \geq 6$ draw the following apron on the shirt.</p>  <p>(b) If your answer is $x \geq 4$ draw the following apron on the shirt.</p> 
<p>12. $-x-2 > 2(3-x)$</p>	<p>(a) If your answer is $x > 6$ draw wavy horizontal lines in the background. Space them 1 inch apart.</p>  <p>(b) If your answer is $x > 8$ draw straight horizontal lines in the background. Space them 1 inch apart.</p> 	<p>13. $1-x < 2x-5$</p>	<p>(a) If your answer is $x < -6$ outline the hat in green.</p> <p>(b) If your answer is $x > 2$ outline the hat in black.</p>

Copyright © 2007 by Kristin DeWitt

Directions: Solve each inequality and COLOR the object that corresponds with your answer. SHOW YOUR STEPS!!!

<p>13. $1-x < 2x-5$</p>	<p>(a) If your answer is $x < -6$ outline the hat in green.</p> <p>(b) If your answer is $x > 2$ outline the hat in black.</p>	<p>14. $3x-1 \leq 2(x-1)$</p>	<p>(a) If your answer is $x \leq -1$ outline the ears in brown.</p> <p>(b) If your answer is $x \leq -3$ outline the ears in orange.</p>
<p>16. $3x-4 > 2(x+1)+5$</p>	<p>(a) If your answer is $x > 11$ color the eyes green.</p> <p>(b) If your answer is $x > 6$ color the eyes blue.</p>	<p>17. $4+2(x+1) \leq x-3$</p>	<p>(a) If your answer is $x \leq -9$ outline the nose and eyes in black.</p> <p>(b) If your answer is $x \leq -\frac{3}{2}$ outline the nose and eyes in orange.</p>
<p>19. $4(x+2)-8 < 2x$</p>	<p>(a) If your answer is $x < 2$ color the tongue and lip red.</p> <p>(b) If your answer is $x < 0$ color the tongue and lip pink.</p>	<p>20. $1+3(x+1) \geq x-2$</p>	<p>(a) If your answer is $x \geq -3$ outline the mouth and tongue in red.</p> <p>(b) If your answer is $x \geq -2$ outline the mouth and tongue in black.</p>
<p>22. $2(x+1) \geq 3(x-1)$</p>	<p>(a) If your answer is $x \geq -5$ outline the checks in black.</p> <p>(b) If your answer is $x \leq 5$ outline the checks in red.</p>	<p>23. $-2(x-2) < -4(1+x)$</p>	<p>(a) If your answer is $x < -2$ color the ears, nose, face, neck, and arms orange.</p> <p>(b) If your answer is $x < -4$ color the ears, nose, face, neck, and arms brown.</p>
<p>25. $-2(2-x) < -5(x-1)$</p>	<p>(a) If your answer is $x < \frac{2}{3}$ leave the rest of the apron white.</p> <p>(b) If your answer is $x < \frac{1}{3}$ color the rest of the apron yellow.</p>	<p>26. $4(x+1)-3 \geq -(x-1)+10$</p>	<p>(a) If your answer is $x < \frac{2}{3}$ color the letters on the apron green.</p> <p>(b) If your answer is $x \leq -1$ color the letters on the apron blue.</p>
<p>27. $\frac{2}{3}(6x+3) < x+5$</p>	<p>(a) If your answer is $x < \frac{2}{3}$ color EVERY OTHER square in the background yellow.</p> <p>(b) If your answer is $x < 1$ color EVERY OTHER square in the background red.</p>	<p>15. $\frac{1}{4}(8x-4) > 3x-1$</p>	<p>(a) If your answer is $x < 0$ color the hair black.</p> <p>(b) If your answer is $x < -2$ color the hair yellow.</p>
<p>18. $x-5 \leq \frac{1}{3}(9x-6)$</p>	<p>(a) If your answer is $x \geq -\frac{1}{2}$ color the mustache brown.</p> <p>(b) If your answer is $x \geq -\frac{3}{2}$ color the mustache black.</p>	<p>21. $-(x-4) \geq -2x$</p>	<p>(a) If your answer is $x \geq -4$ outline the chin in brown.</p> <p>(b) If your answer is $x \geq 4$ outline the chin in orange.</p>
<p>24. $\frac{1}{2}(2x-4) \leq \frac{1}{3}(6x-9)$</p>	<p>(a) If your answer is $x > 6$ draw the following apron on the shirt.</p>  <p>(b) If your answer is $x > 4$ draw the following apron on the shirt.</p> 	<p>28. $2(x+1) < x+3$</p>	<p>(a) If your answer is $x < -\frac{2}{3}$ color the eyes green.</p> <p>(b) If your answer is $x < -\frac{1}{3}$ color the eyes blue.</p>

Artistic Tip: When you are done coloring, it looks nice to outline the major features using a black crayon or marker.

Copyright © 2007 by Kristin DeWitt

