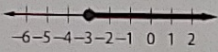
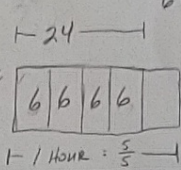
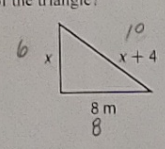
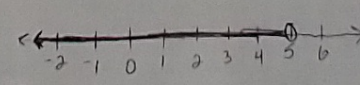


<p>1. What value of m makes the equation $\frac{1}{15} = \frac{3}{5}m$ true?</p> $\frac{5}{3} \cdot \frac{3}{5} m = \frac{1}{15} \cdot \frac{5}{3}$ $m = \frac{1}{9}$ $\frac{1}{15} = \frac{3}{5} \left(\frac{1}{9}\right)$ $\frac{1}{15} = \frac{3}{45} \text{ CHECK}$ $\frac{1}{15} = \frac{1}{15}$	$m = \frac{1}{9}$
<p>2. Solve $7x - 9 = -30$.</p> $\begin{array}{r} 7x - 9 = -30 \\ +9 \quad +9 \\ \hline 7x = -21 \\ \frac{7x}{7} = \frac{-21}{7} \\ x = -3 \end{array}$ $\begin{array}{r} 7(-3) - 9 = -30 \\ -21 - 9 = -30 \\ -30 = -30 \text{ CHECK} \end{array}$	$x = -3$
<p>3. Which inequality is graphed on the number line shown?</p>  <p> <input type="checkbox"/> A. $x < -3$ <input type="checkbox"/> B. $x \leq -3$ <input checked="" type="checkbox"/> C. $x \geq -3$ <input type="checkbox"/> D. $x > -3$ </p>	<p>C</p>
<p>4. The side lengths, in centimeters, of a triangle are $3x$, 15, and $4(x-1)$. The perimeter of the triangle is 60 centimeters. What is the length of the longest side of the triangle?</p> $\begin{array}{r} 3x + 15 + 4(x-1) = 60 \\ 3x + 15 + 4x - 4 = 60 \\ 7x + 11 = 60 \\ \underline{-11} \quad \underline{-11} \\ 7x = 49 \\ \frac{7x}{7} = \frac{49}{7} \\ x = 7 \end{array}$ $\begin{array}{r} 3x = 3(7) = 21 \\ 15 = 15 \\ 4(x-1) = 4(7-1) = 4(6) = 24 \\ \hline \text{CHECK} \quad 60 \end{array}$	<p>24 cm</p>
<p>5. A computer game lets you build your own amusement park. Suppose it costs you \$25,000 a day to run the park. Assume the average daily attendance is 1250 people. How much should you charge for admission if you want to make a profit of at least \$30,000 for a 30-day month? Write an inequality to represent this situation, and solve.</p> <p>Hints: What is the average profit you want to make each day?</p> $\frac{1250x}{1250} \geq \frac{26,000}{1250}$ $x \geq 20.8$	<p>ADMISSION = \$20.80</p> $\begin{array}{l} 1250(20.8)(30) = 78,000 \\ 25,000(30) + 30,000 = 78,000 \\ \text{CHECK} \end{array}$

<p>6. Taylor attached 24 ribbons to a jacket in $\frac{4}{5}$ hour. At this rate, how many ribbons could he attach in one hour?</p> $\frac{24}{\frac{4}{5}} = 24 \cdot \frac{5}{4} = 30$ <p>CHECK</p>  <p>$6(5) = 30$</p> <p>30 RIBBONS IN 1 HOUR</p>	
<p>7. The perimeter of the triangle shown is 24 meters. What is the length of the shortest side of the triangle?</p>  $x + x + 4 + 8 = 24$ $2x + 12 = 24$ $-12 \quad -12$ $\frac{2x}{2} = \frac{12}{2}$ $x = 6$ <p>CHECK</p> $\frac{6}{10} + 8 = 24$ <p>6m</p>	
<p>8. Solve $0.5(8x - 12) = -10$.</p> $0.5(8x - 12) = -10$ $4x - 6 = -10$ $\frac{4x}{4} = \frac{-4}{4}$ $x = -1$ <p>CHECK</p> $0.5[8(-1) - 12] = -10$ $0.5[-8 - 12]$ $0.5[-20] = -10$ $-10 = -10$ <p>CHECK</p> <p>$x = -1$</p>	
<p>9. Three times the quantity $h + 4$ equals four times the quantity $h - 1$. What value of h makes this sentence true?</p> $3(h + 4) = 4(h - 1)$ $3h + 12 = 4h - 4$ $-3h \quad -3h$ $12 = h - 4$ $\frac{+4}{16} = \frac{+4}{+4}$ $16 = h$ <p>CHECK</p> $3(16 + 4) = 4(16 - 1)$ $3(20) = 4(15)$ $60 = 60$ <p>$h = 16$</p>	
<p>10. Solve $18 > -12 + 6m$ THEN GRAPH</p> $\frac{+12}{6} \quad \frac{+12}{6}$ $\frac{30}{6} > \frac{6m}{6}$ $5 > m \quad m < 5$  <p>$5 > m$ or $m < 5$</p>	