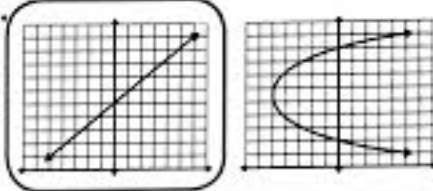
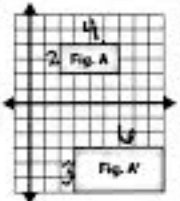
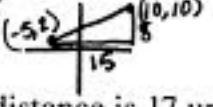
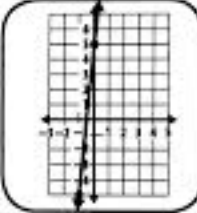



## Lesson #117

<p>1.</p> <p>8.NS.2</p> <p style="text-align: center;">8.9</p>	<p>2.</p> <p>8.EE.4</p> <p style="text-align: center;"><math>7.9352 \times 10^{-5}</math></p>
<p>3.</p> <p>8.EE.7</p> $\frac{1}{3}t - 4\left(\frac{2}{3}t - 3\right) = \frac{2}{3}t - 6$ $\frac{1}{3}t - \frac{8}{3}t + 12 = \frac{2}{3}t - 6$ <p style="text-align: center;"><math>t = 6</math></p> $-\frac{7}{3}t + 12 = \frac{2}{3}t - 6$ $-\frac{7}{3}t - 12 - \frac{2}{3}t - 12 = -18$	<p>4.</p> <p>8.F.3</p> 
<p>5.</p> <p>8.G.4</p>  <p>Shapes are similar. Side lengths have ratio of 2:3. Fig. A has been translated down and dilated by a scale factor of 1.5</p> <p style="text-align: center;"><math>\frac{A'}{A} = \frac{3}{2}</math></p>	<p>6.</p> <p>8.G.9</p> <p style="text-align: center;"><math>V = 14,130 \text{ in.}^3</math></p>
<p>7.</p> <p>8.EE.8</p> $2y = x + 3$ $2y = y + 3$ $-y = 3$ $y = -3$ <p style="text-align: center;">(3, 3)</p>	<p>8.</p> <p>8.G.8</p> $x_2 - x_1 = 15$ $y_2 - y_1 = 8$  <p>The distance is 17 units.</p> $a^2 + b^2 = c^2$ $8^2 + 15^2 = c^2$ $64 + 225 = c^2$ $\sqrt{289} = c$
<p>9.</p> <p>8.F.2</p> <p>Sara charges \$10 to babysit. She also charges and additional \$5.00 for every hour she is there.</p> 	<p>10.</p> <p>8.NS.1</p> <p style="text-align: center;">rational because it is a repeating decimal (0.<math>\overline{183}</math>)</p>
<p>11.</p> <p>8.G.7</p> <p>16 in.</p>  $16^2 + b^2 = 18.4^2$ $256 + b^2 = 338.56$ $b^2 = 82.56$ $b = \sqrt{82.56}$	<p>12.</p> <p>8.EE.2</p> $A = \pi r^2$ $\sqrt{\frac{314}{\pi}} = \frac{r}{\sqrt{\pi}}$ $r = 10 \text{ cm}$