



PARTS OF SIMILAR TRIANGLES

The Weight Room

<p>1)</p> <p>$\triangle DAR \sim \triangle ING$</p> <p>$\frac{18}{14} = \frac{x}{11.5}$</p> <p>$x = 14.79$</p>	<p>2)</p> <p>$\triangle FLI \sim \triangle GHT$</p> <p>$\frac{12}{9} = \frac{y}{6}$</p> <p>$y = 8m$</p>
<p>3)</p> <p>$\frac{14}{17} = \frac{x}{x+2} \Rightarrow x = \frac{28}{3}$</p> <p>$\triangle STA \sim \triangle PLE$</p>	<p>4)</p> <p>$\frac{24}{35} = \frac{a+6}{2a+3}$</p> <p>$a = \frac{178}{13}$</p>
<p>5)</p> <p>$\frac{10}{15} = \frac{m}{14}$</p> <p>$m = \frac{28}{3} \text{ in}$</p> <p>$CE = 14 \text{ in.}$</p>	<p>6)</p> <p>Find w and y.</p> <p>$\frac{102}{68} = \frac{3y+2}{y+6}$</p> <p>$\frac{102}{68} = \frac{3w+6}{2w-2}$</p> <p>$w = 10 \text{ cm}$</p>
<p>7)</p> <p>$\frac{14}{8} = \frac{k+2}{4}$</p> <p>$k = \frac{8}{3} \text{ cm}$</p>	<p>8)</p> <p>Be careful! This one is much trickier than it looks.</p> <p>$\frac{10}{20} = \frac{8.65}{c}$</p> <p>$c = 17.3 \text{ ft}$</p>