

Ch 8 Quiz

- ① $\frac{6}{12}$ $\frac{a}{12} \times \frac{b}{6} \Rightarrow \frac{6a}{12} = \frac{12b}{6} \Rightarrow \frac{6}{12} = \frac{b}{a}$
- ② 1:48 $\frac{\text{model}}{\text{real}} \Rightarrow \frac{2\text{in}}{8\text{ft}} = \frac{2\text{in}}{96\text{in}} = \frac{1}{48}$
- ③ $x=11$ $\frac{4}{8} \times \frac{x}{22} \Rightarrow 8x = 4 \cdot 22 \Rightarrow x = \frac{88}{8} = 11$
- ④ $x=6$ $\frac{x}{6} \times \frac{12}{2x} \Rightarrow 2x^2 = 72 \Rightarrow x^2 = 36 \Rightarrow x = 6$
- ⑤ 0 $\begin{matrix} \text{ABC} \\ \text{LMD} \end{matrix}$
- ⑥ MD $\triangle \text{ABC} \sim \triangle \text{LMD}$
- ⑦ 3.6 ft $\frac{\text{Short}}{\text{Long}} \Rightarrow \frac{3}{5} = \frac{x}{6} \Rightarrow \frac{18}{5} = x \Rightarrow x = 3.6$

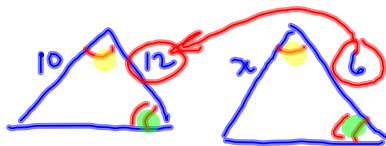
(8) NO, $\frac{2}{5} \neq \frac{3}{7}$

(9) 780 mi $\frac{\text{map}}{\text{real}} \Rightarrow \frac{1}{120} = \frac{6.5}{x} \Rightarrow x = 6.5(120) = 780$

(10) yes, AA~

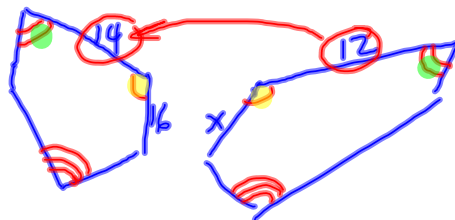
(11) yes, SAS~

(12) $x = 5$



$$\frac{x}{10} = \frac{6}{12} \Rightarrow x = \frac{60}{12} = 5$$

(13) $x = 13.7$



$$\frac{x}{16} = \frac{12}{14} \Rightarrow x = \frac{12 \cdot 16}{14} = 13.7$$