

Answers Chapter 8 Checkpoint Quiz 1 & 2

Front page, L8.1 – L8.2

1) $\frac{a}{12} = \frac{b}{6} \rightarrow 6a = 12b \rightarrow \frac{6a}{12a} = \frac{12b}{12a} \rightarrow \frac{b}{a} = \frac{6}{12} \text{ or } \frac{1}{2}$

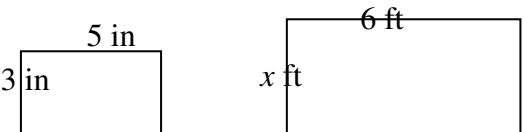
2) $\frac{2 \text{ in}}{8 \text{ ft}} = \frac{2 \text{ in}}{96 \text{ in}} = \frac{1}{48} \text{ or } 1:48$

3) $\frac{4}{8} = \frac{x}{22} \rightarrow 4 \cdot 22 = 8x \rightarrow 8x = 88 \rightarrow x = 11$

4) $\frac{x}{6} = \frac{12}{2x} \rightarrow x \cdot 2x = 6 \cdot 12 \rightarrow 2x^2 = 72 \rightarrow x^2 = 36 \rightarrow x = \pm 6$

5) $\angle O$

6) MO

7)  $\frac{x}{3} = \frac{16}{5} \rightarrow 5x = 18 \rightarrow x = \frac{18}{5} \rightarrow x = 3.5 \text{ ft}$

8) $\frac{5}{2} \neq \frac{7}{3}$ and $\frac{5}{3} \neq \frac{7}{2}$ *NO, sides are not proportional*

9) $\frac{1 \text{ in}}{6.5 \text{ in}} = \frac{120 \text{ mi}}{x \text{ mi}} \rightarrow x = 6.5 \cdot 120 \rightarrow x = 780 \text{ mi}$

Back page, L8.3 – L8.5

1) *Yes, AA~*

2) *Yes, SAS~*

3) $\frac{x}{10} = \frac{6}{12} \rightarrow 12x = 60 \rightarrow x = \frac{60}{12} \rightarrow x = 5.0$

4) $\frac{x}{16} = \frac{12}{14} \rightarrow 14x = 192 \rightarrow x = \frac{192}{14} \rightarrow x = 13.7$

5) skip

6) $\frac{x}{10} = \frac{5}{6} \rightarrow 6x = 50 \rightarrow x = 8.3$

7) $\frac{x}{5} = \frac{3}{6} \rightarrow 6x = 15 \rightarrow x = 2.5$