

$$3 \text{ (A) } 4x = 2(3-x)$$

$$2x + 4x = 6 - 2x + 2x$$

$$\frac{6x}{6} = \frac{6}{6}$$

$$x = 1$$

3. 2<sup>nd</sup> 0

$$5(2x-4) = 9(x-3)$$

$$-9x + 10x - 20 = 9x - 27 - 9x$$

$$20 + x - 20 = -27 + 20$$

$$x = -7$$

$$4. R) \quad 1.3x + 2.4 = 5.4 - 0.2x$$
$$+ 0.2x \qquad \qquad \qquad = \quad + 0.2x$$

$$-2.4 + 1.5x + 2.4 = 5.4 - 2.4$$

$$\frac{1.5x}{1.5} = \frac{3}{1.5}$$

$$x = 2$$

4. 2<sup>nd</sup> R

$$-0.04x + 2.3 + 0.04x = 0.1x - 0.1 - 0.04x$$

$$0.1 + 2.3 = 0.06x - 0.1 + 0.1$$

$$\frac{2.4}{0.06} = \frac{0.06x}{0.06}$$

$$40 = x$$

$$4. T) \quad 2.4 - 0.03x = 0.44 - 0.1x$$
$$\quad \quad \quad + 0.03x = \quad \quad \quad + 0.03x$$

$$2.4 = 0.44 - 0.07x$$
$$-0.44 = -0.44$$

$$\frac{1.96}{-0.07} = \frac{-0.07x}{-0.07}$$

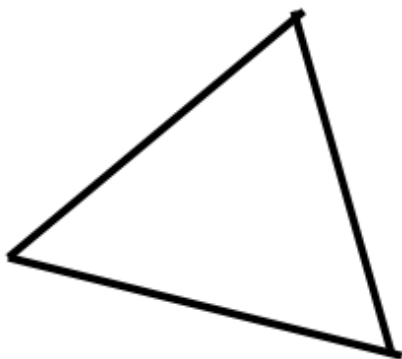
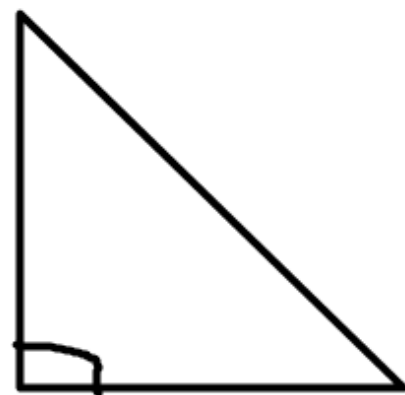
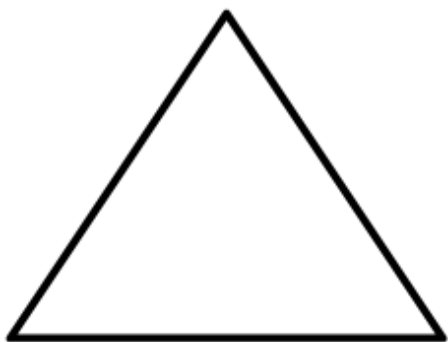
$$-28 = x$$

$$4.P) 4(0.03x - 2) = -2.96$$

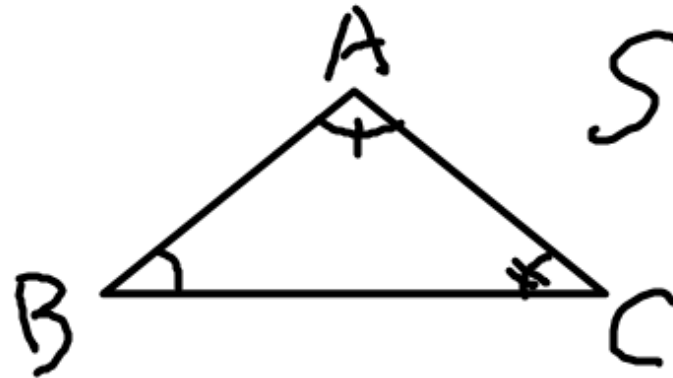
$$8 + 0.12x - 8 = -2.96 + 8$$

$$\frac{0.12x}{0.12} = \frac{5.04}{0.12}$$

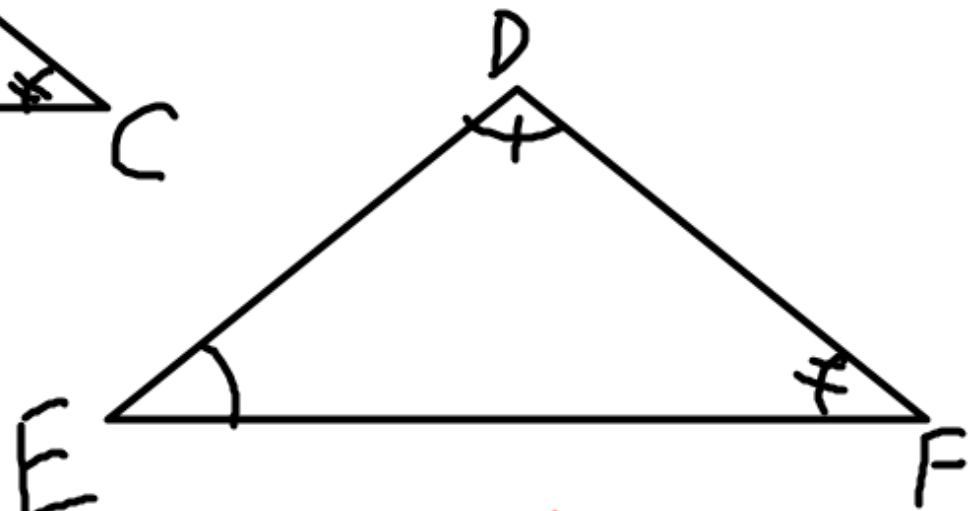
$$x = 42$$



Similarity



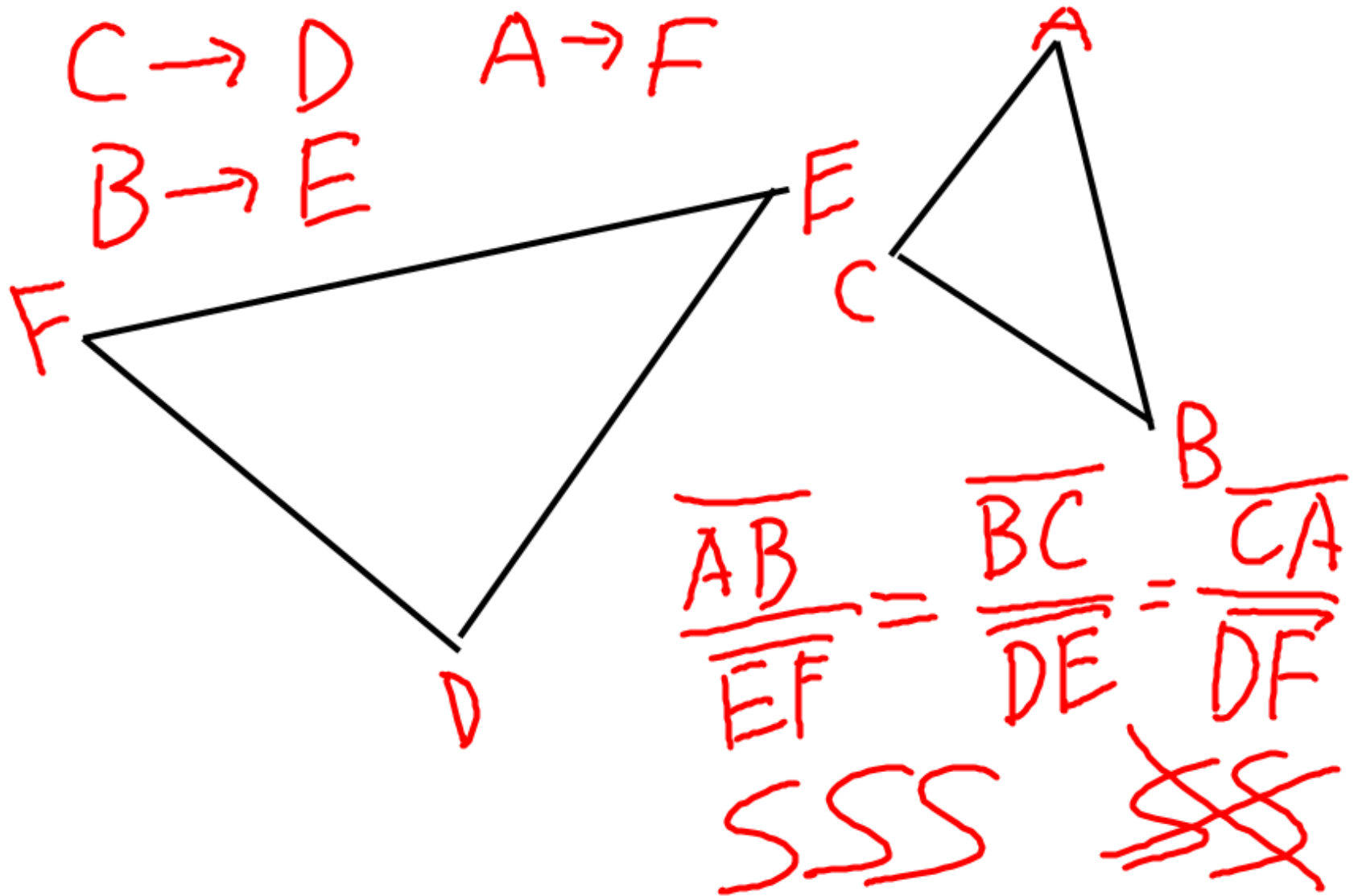
Similar



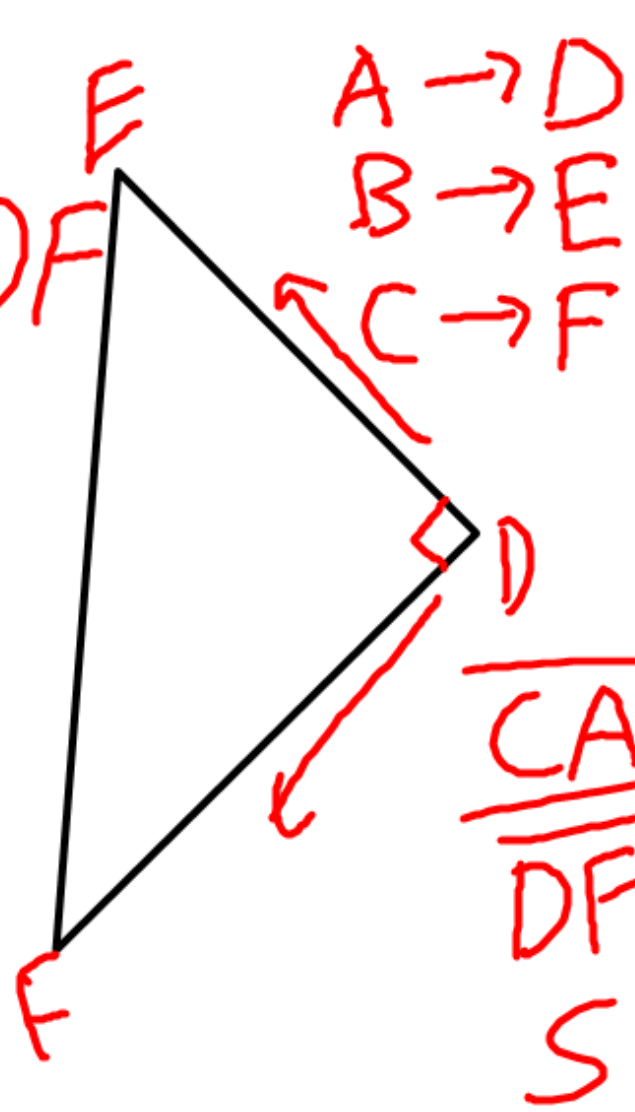
$$\begin{aligned}\angle ABC &= \angle DEF \\ \angle CAB &= \angle FDE \\ \angle ACB &= \angle DFE\end{aligned}$$

AAA  
or  
AA





$\angle CAB = \angle EDF$



$A \rightarrow D$   
 $B \rightarrow E$   
 $C \rightarrow F$

$$\frac{\overline{CA}}{\overline{DF}} = \frac{\overline{AB}}{\overline{DE}}$$

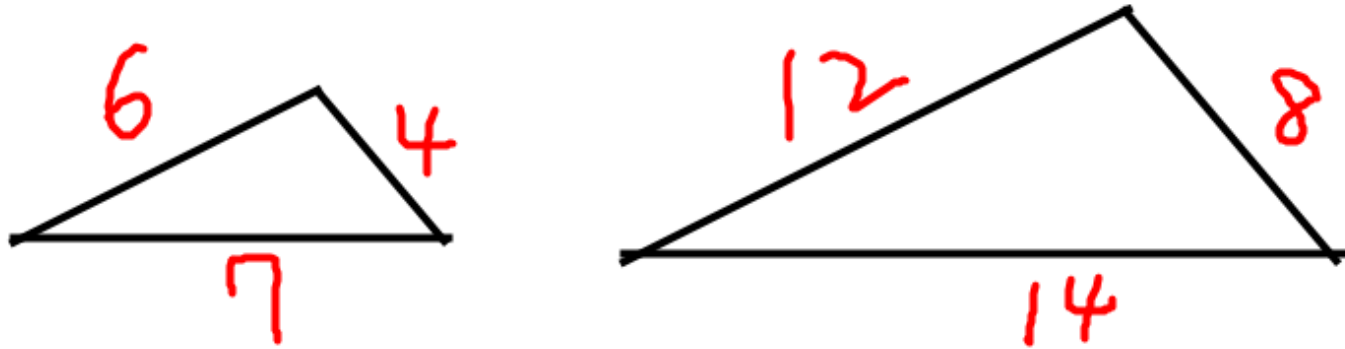


SAS

# Similar Triangles

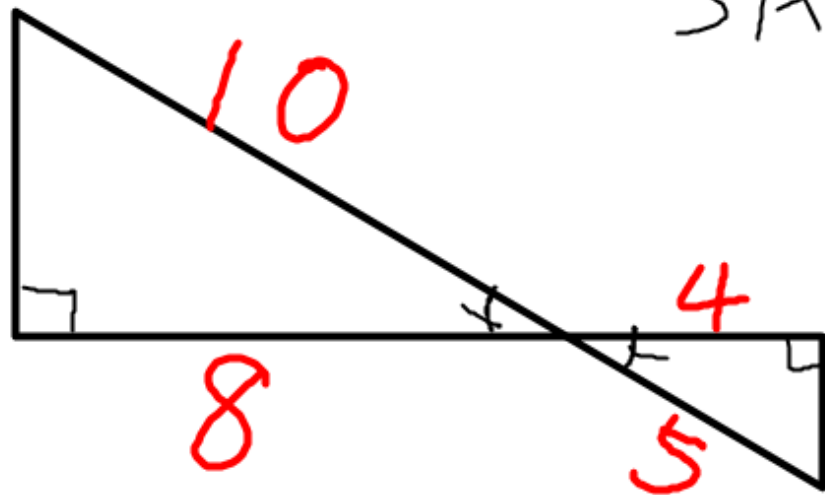
- ① AA
- ② SSS
- ③ SAS

Pg. 215  
# 8, 9, 10

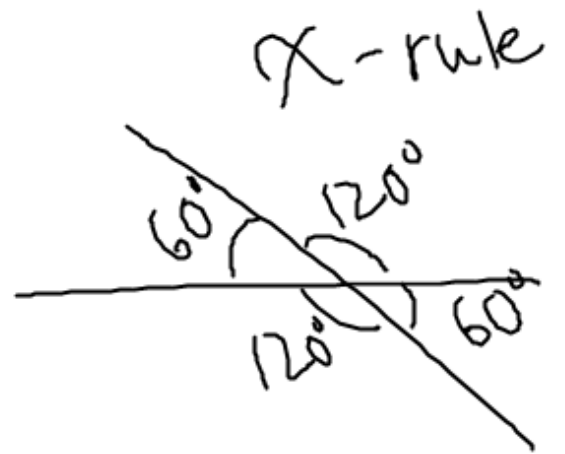


$$\frac{4}{8} = \frac{6}{12} = \frac{7}{14} = \frac{1}{2} \quad SSS$$

$$4:8 = 6:12 = 7:14$$

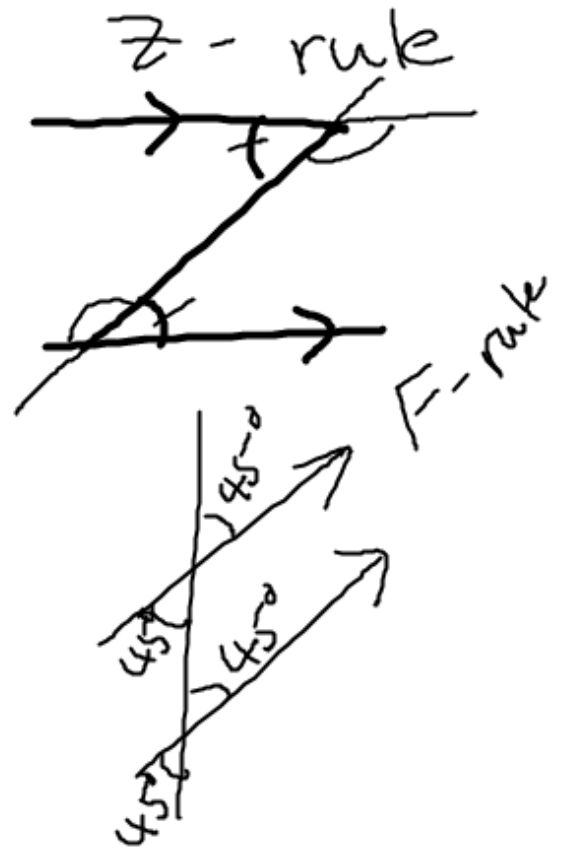
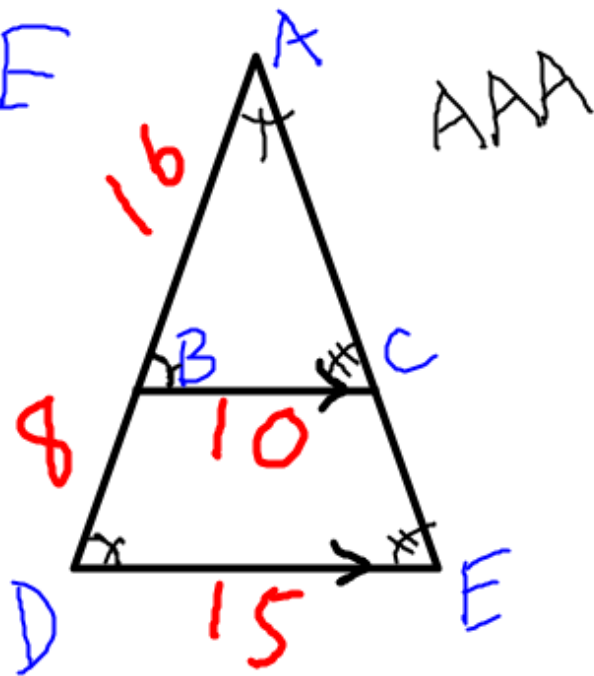


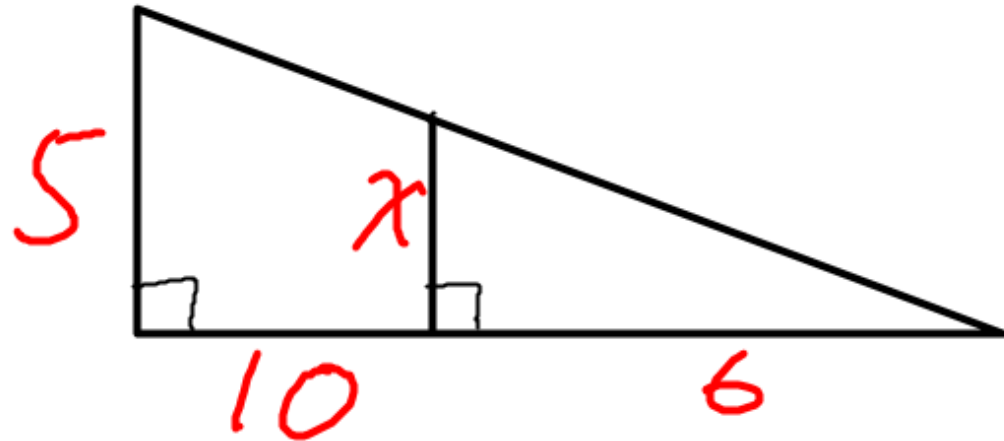
SAS



$$\frac{4}{8} = \frac{5}{10}$$

$$\angle BAC = \angle DAE$$

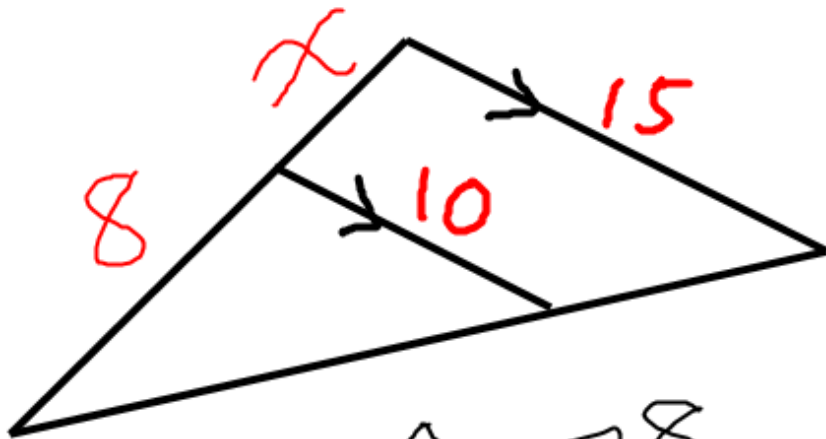




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$$\frac{6}{10} \times \frac{x}{5}$$

$$\frac{30}{10} = \frac{10x}{10} \quad x=3$$



$$\frac{10}{15} = \frac{8}{8+x}$$

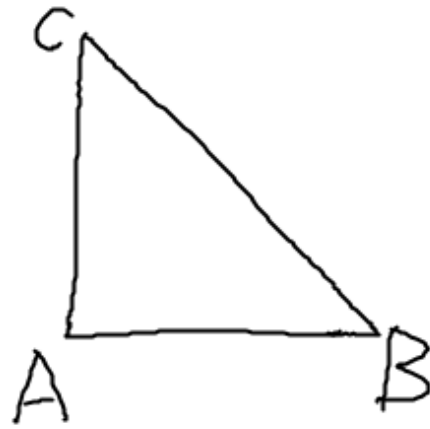
$$10(8+x) = 8(15)$$

$$-80 + 80 + 10x = 120 - 80$$

$$\frac{10x}{10} = \frac{40}{10} \quad x = 4$$



2 (10)



$$\overline{CB} : \overline{SU} = \overline{AB} : \overline{TU} = \overline{AC} : \overline{TS}$$

Skip # 11 on sheet!