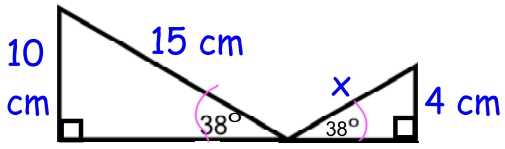
Examples for page 7.14

1. Solve for x.



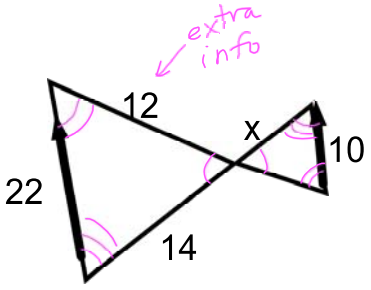
$\frac{10}{4} = \frac{15}{x}$

$10 \cdot x = 4 \cdot 15$

$\frac{10x}{10} = \frac{60}{10}$

$x = 6$ cm

2. Solve for x.



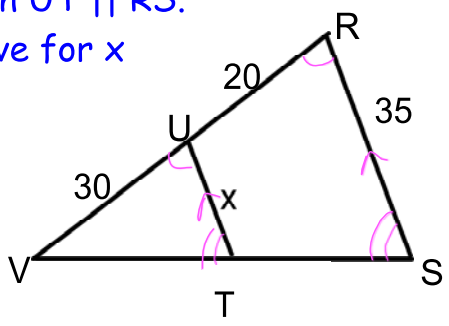
$\frac{22}{10} = \frac{14}{x}$

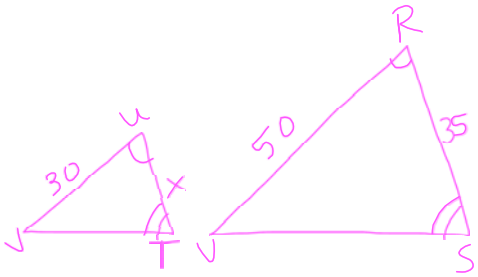
$22 \cdot x = 10 \cdot 14$

$\frac{22x}{22} = \frac{140}{22}$

$x = 6.\overline{36}$ u

3. Given $\overline{UT} \parallel \overline{RS}$.
Solve for x





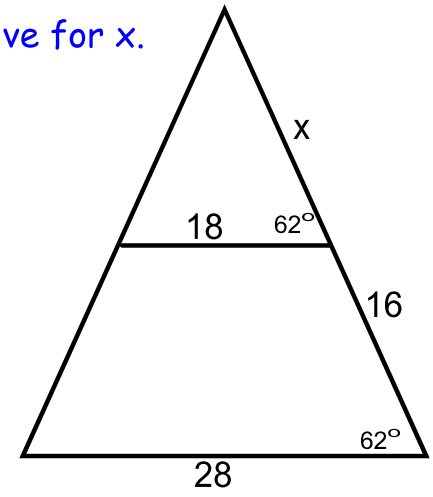
$\frac{30}{50} = \frac{x}{35}$

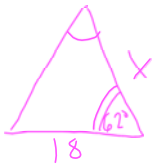
$50 \cdot x = 30 \cdot 35$

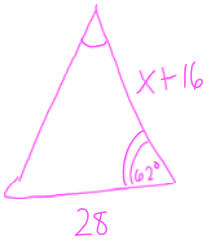
$\frac{50x}{50} = \frac{1050}{50}$

$x = 21$

4. Solve for x.







$\frac{18}{28} = \frac{x}{x+16}$

$18(x+16) = 28x$

$18x + 288 = 28x$

$-18x \quad -18x$

$\frac{288}{10} = \frac{10x}{10}$

$28.8 = x$

$x = 28.8$ u