

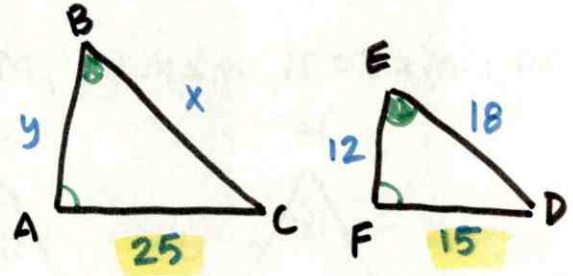
6.4

3) $\triangle ABC \sim \triangle FED$

4) $\frac{BA}{EF} = \frac{AC}{FD} = \frac{CB}{DE}$

5) $\frac{25}{15} = \frac{y}{12}$

6) $\frac{15}{25} = \frac{18}{x}$



7) $y = 20$

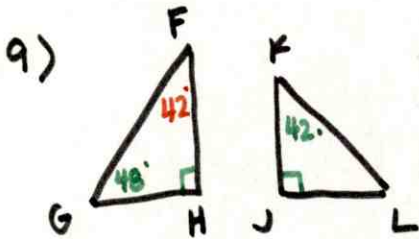
$5 \frac{25}{15} = \frac{y}{12}$

$3y = 60$
 $y = 20$

8) $x = 30$

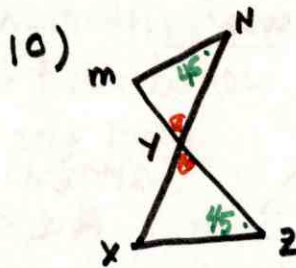
$3 \frac{15}{25} = \frac{18}{x}$

$3x = 90$
 $x = 30$



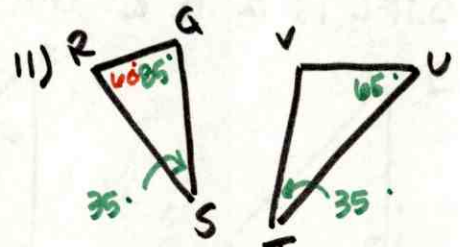
$\angle F = 90 - 48$
 $\angle F = 42$
 $\angle H \cong \angle L$
 $\angle F \cong \angle K$

$\triangle FGH \sim \triangle KJL$



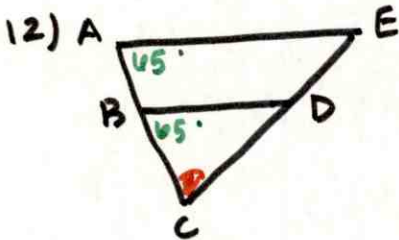
$\angle N \cong \angle Z$
 $\angle MYN \cong \angle XYZ$ VA

$\triangle MNY \sim \triangle XZY$



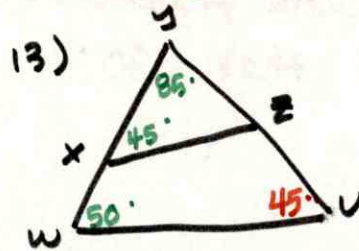
$\angle R = 180 - (85 + 35)$
 $\angle R = 60$
 $\angle S \cong \angle T$

NOT SIMILAR



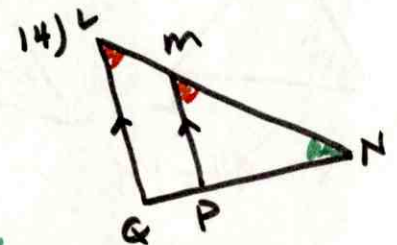
$\angle A \cong \angle DBC$
 $\angle C \cong \angle C$ Reflexive

$\triangle AEC \sim \triangle BDC$



$\angle V = 180 - (85 + 50)$
 $\angle V = 45$
 $\angle Y \cong \angle Y$ Reflexive
 $\angle YXZ \cong \angle YZV$

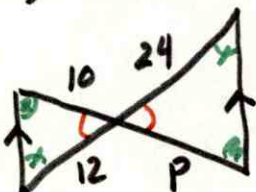
$\triangle YXZ \sim \triangle YZV$



$\angle L \cong \angle NMP$ A1
 $\angle N \cong \angle N$
OR $\angle Q \cong \angle NPM$ A1

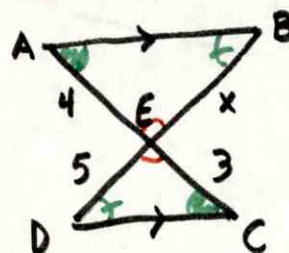
$\triangle LNQ \sim \triangle MNP$

16) what is the value of p?



$\frac{10}{p} = \frac{12}{24}$
 $P = 20$ B

20) Find BD.



$\frac{x}{5} = \frac{4}{3}$

$3x = 20$

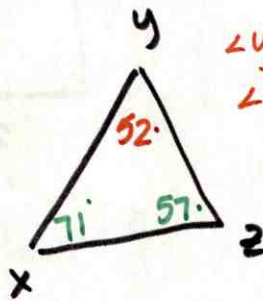
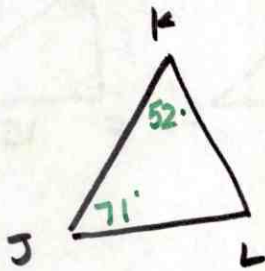
$x = \frac{20}{3}$

$\frac{20}{3} + 5$

$= \frac{35}{3}$ A

$\triangle JKL \sim \triangle XYZ$?

26) $m\angle J = 71^\circ$, $m\angle K = 52^\circ$, $m\angle X = 71^\circ$, $m\angle Z = 57^\circ$

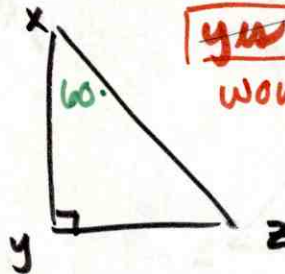
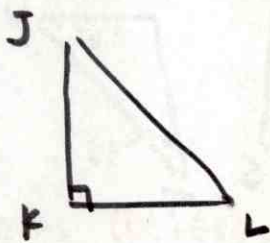


$$\begin{aligned}\angle Y &= 180 - (71 + 57) \\ \angle Y &= 52^\circ\end{aligned}$$

yes, by AA

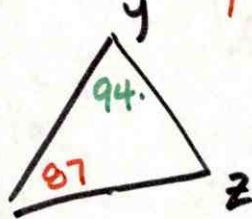
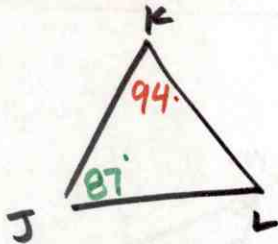
$$\begin{aligned}\angle J &\cong \angle X \\ \angle K &\cong \angle Y\end{aligned}$$

27) $\triangle JKL$ is a $\text{rt } \triangle$ and $m\angle X + m\angle Y = 150^\circ$



yes, either $\angle X$ or $\angle Y$ would need to $= 90^\circ$; then the other angles would be the same

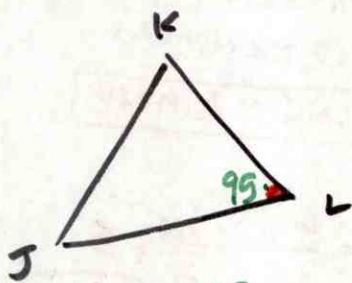
28) $m\angle J = 87^\circ$ and $m\angle Y = 94^\circ$



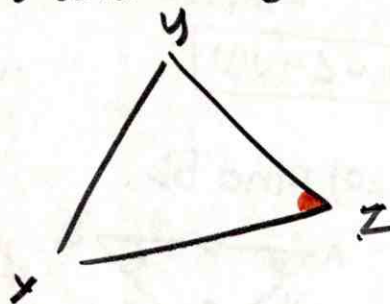
NO, b/c $87 + 94 = 181$ and this is greater than 180.

$$87 + 94 = 181 \times$$

29) $m\angle J + m\angle K = 85^\circ$ and $m\angle Y + m\angle Z = 80^\circ$



$$\begin{aligned}\angle L &= 180 - 85 \\ &= 95\end{aligned}$$



NO, b/c $\angle J + \angle K = 85$, then $m\angle L = 95^\circ$. Since $\angle Y + \angle Z = 80^\circ$ and $\angle L$ should be \cong to $\angle Z$