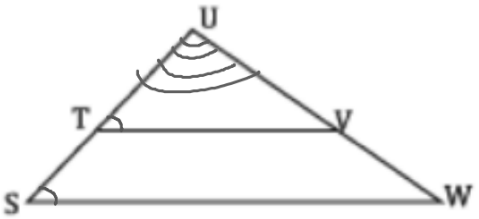
~~SSS~~

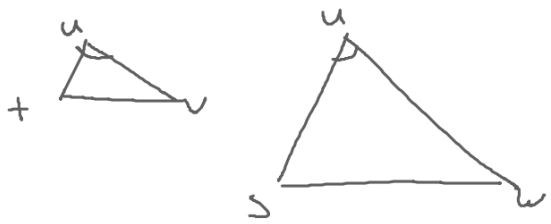
SAS

AA

Given: ∠S≅∠UTV

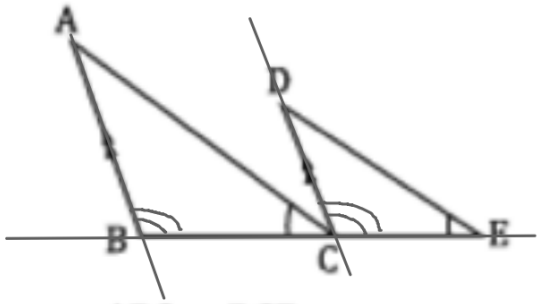


Prove: ΔSUW~ΔTUV



Statement	Reason
1) ∠S ≅ ∠UTV	1) Given
2) ∠U ≅ ∠U	2) Reflexive Prop.
3) ΔSUW ~ ΔTUV	3) AA

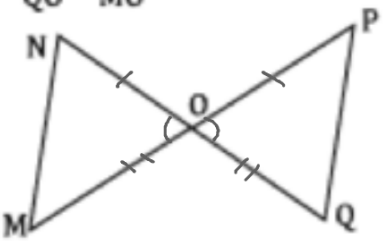
Given: $\overline{AB} \parallel \overline{DC}$, $\angle ACB \cong \angle E$



Prove: $\triangle ABC \sim \triangle DCE$

Statement	Reason
1) $\overline{AB} \parallel \overline{DC}$, $\angle ACB \cong \angle E$	1) Given
2) $\angle B \cong \angle DCE$	2) Corresponding $\angle$'s $\cong$
3) $\triangle ABC \sim \triangle DCE$	3) AA

Given: $\frac{NO}{QO} = \frac{PO}{MO}$

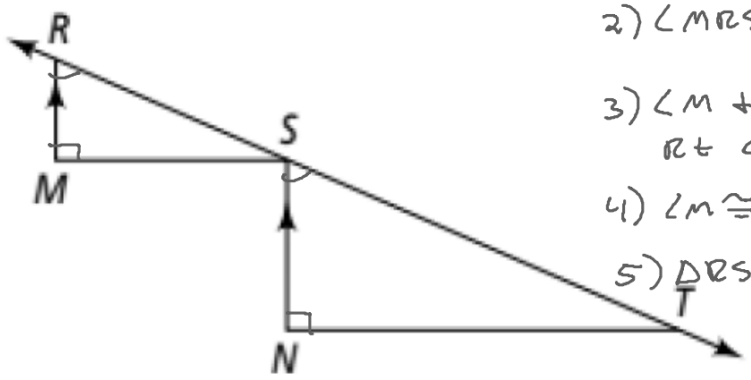


Prove: $\triangle MNO \sim \triangle PQO$

Statement	Reason
1) $\frac{NO}{QO} = \frac{PO}{MO}$	1) Given
2) $\angle NOM \cong \angle POQ$	2) Vertical $\angle$'s $\cong$.
3) $\triangle MNO \sim \triangle PQO$	3) SAS

Given: $\overline{RM} \parallel \overline{SN}$, $\overline{RM} \perp \overline{MS}$, $\overline{SN} \perp \overline{NT}$

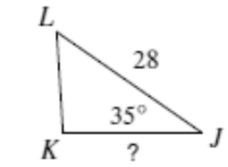
Prove: $\triangle RSM \sim \triangle STN$

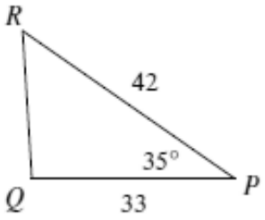


Statement	Reason
1) $\overline{RM} \parallel \overline{SN}$ $\overline{RM} \perp \overline{MS}$ $\overline{SN} \perp \overline{NT}$	1) Given
2) $\angle MRS \cong \angle NST$	2) Corresponding $\angle$'s $\cong$.
3) $\angle M$ & $\angle N$ are Rt $\angle$'s	3) Def $\perp$ lines
4) $\angle M \cong \angle N$	4) All Rt $\angle$'s $\cong$.
5) $\triangle RSM \sim \triangle STN$	5) AA

Find the missing length. The triangles in each pair are similar.

13)



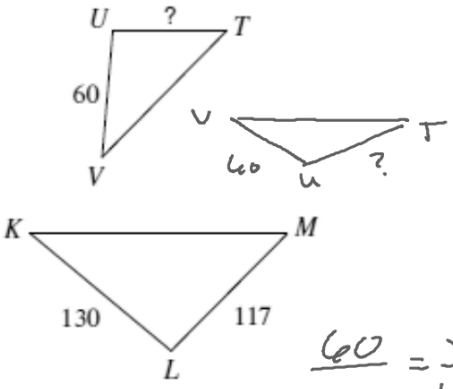


$\frac{28}{42} = \frac{x}{33}$

$\frac{42x}{42} = \frac{924}{42}$

$x = 22$

14)



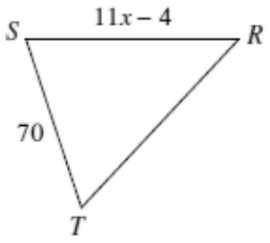
$\frac{60}{130} = \frac{x}{117}$

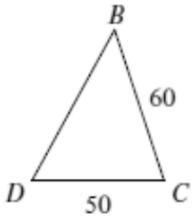
$130x = 7020$

$x = 54$

Solve for x. The triangles in each pair are similar.

17)





$\frac{11x-4}{50} = \frac{70}{60}$

$\frac{11x-4}{50} = \frac{7}{6}$

$66x - 24 = 350$

$66x = 374$

$x = 5.\overline{6}$

$\frac{17}{3}$

18)