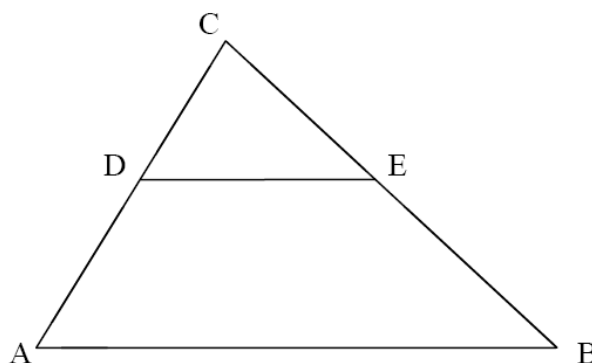


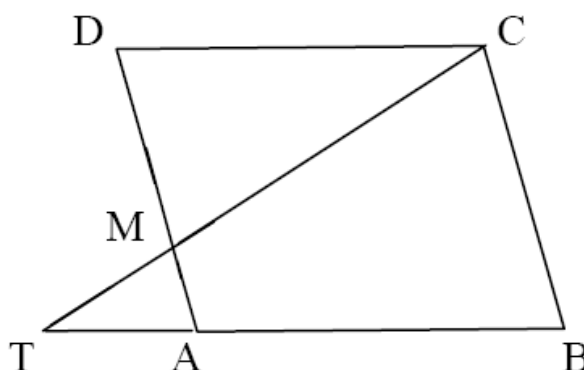
Name: _____

Similar Triangles

Exercise 1: $\triangle ABC$ with $\overline{DE} \parallel \overline{AB}$, $DC=4$ cm, $CE=5$ cm, $BE=7$ cm, $DE=6$ cm and $AD=(x+3)$ cm. Find the value of x and AB .

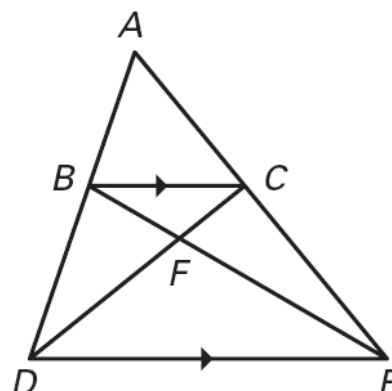


Exercise 2: Rhombus $ABCD$, $DC=12$ cm, $AT=9$ cm, $MC=8$ cm. Find the value of TM .

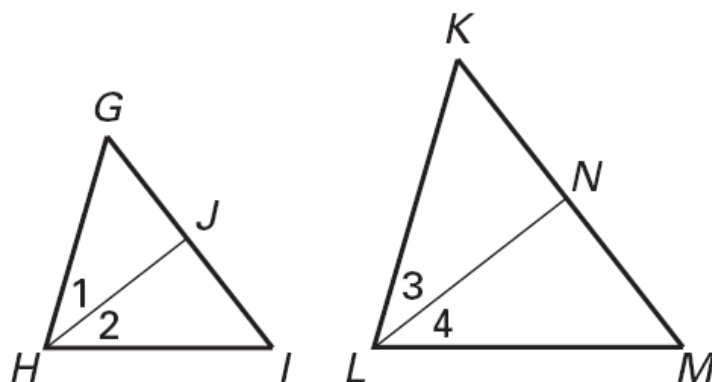


Exercise 3: In the diagram, $\overline{BC} \parallel \overline{DE}$

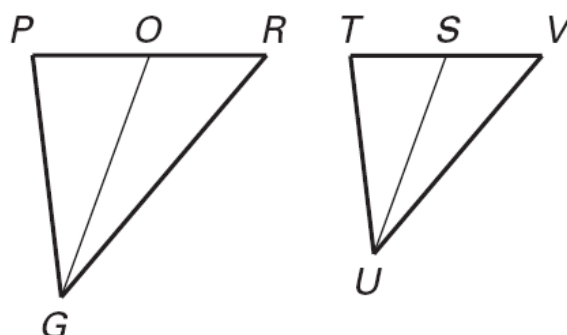
- 1) Prove $\triangle ABC \sim \triangle ADE$
- 2) Name another pair of similar triangles in the diagram.
- 3) Show that $\frac{AC}{AE} = \frac{BF}{FE}$



Exercise 4: Given: $\triangle GHI \sim \triangle KLM$, \overline{HJ} bisects $\angle GHI$, \overline{LN} bisects $\angle KLM$. Prove: $\frac{HJ}{LN} = \frac{GH}{KL}$



Exercise 5: Given: $\triangle PGR \sim \triangle TUV$, \overline{OG} bisects $\triangle PGR$, \overline{SU} bisects $\triangle TUV$. Prove: $\frac{OG}{SU} = \frac{PR}{TV}$



Exercise 6: Given: $\angle WXY$ is a right angle, $\overline{XZ} \perp \overline{WY}$. Prove: $\triangle WXZ \sim \triangle XYZ$

