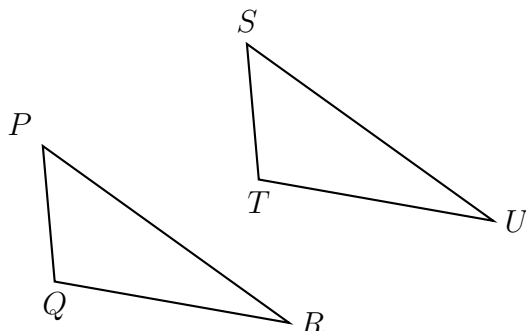


7-6DN-Symmetry

1. A translation maps triangle PQR onto triangle STU .



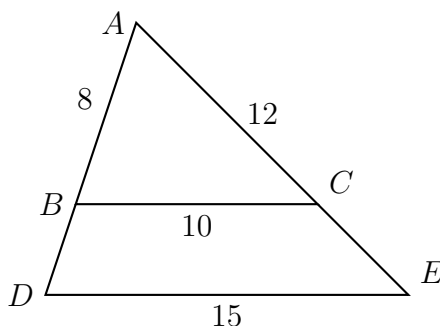
- (a) $Q \rightarrow$ _____
 (b) $\angle QRP \cong$ _____
 (c) _____ $\cong \overline{ST}$
 (d) Justify $\triangle PQR \cong \triangle STU$. Use the words “rigid motion”.

Write each corresponding object.

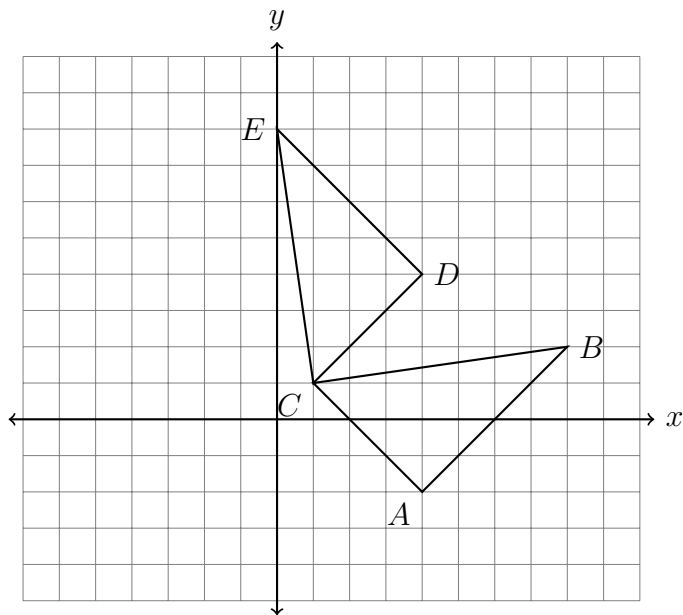
2. Given $\triangle JKL \sim \triangle MNO$. $m\angle K = 40^\circ$ and $m\angle M = 100^\circ$.
Find the measure of $\angle L$.

3. Triangle ABC is dilated with a scale factor of k centered at A , yielding $\triangle ADE$, as shown. Given $AB = 8$, $BC = 10$, $AC = 12$, and $DE = 15$.

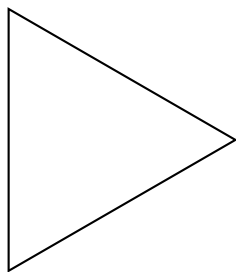
Find AD , CE , and k (the scale factor).



4. What transformation maps $\triangle ABC$ onto $\triangle DEC$, shown below? Fully specify the transformation.



5. What is the smallest non-zero angle of rotation about its center that would map the equilateral triangle onto itself?



6. Given right $\triangle ABC$ with $\overline{AC} \perp \overline{BC}$, $BC = 11.2$, $m\angle B = 63^\circ$. Let $x = AC$. Find x .

