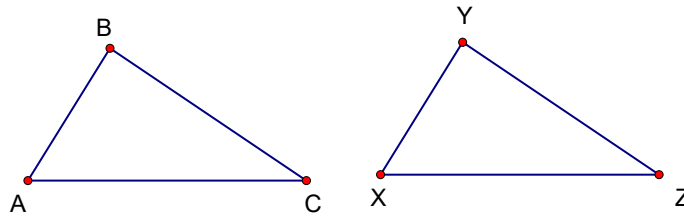
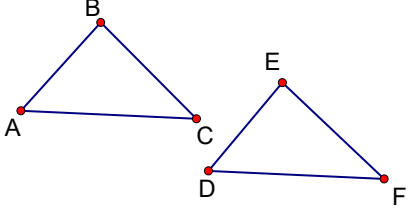


Congruent figures: When two figures are congruent their corresponding angles and corresponding sides are congruent.

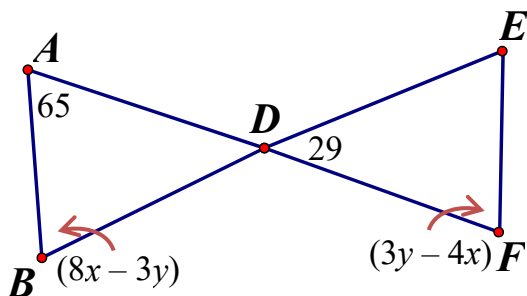
In the figures below $\triangle ABC \cong \triangle XYZ$ which is read, "Triangle ABC is congruent to triangle XYZ ." The order in which the triangle is named is important; the corresponding parts (angles and sides) must match up.



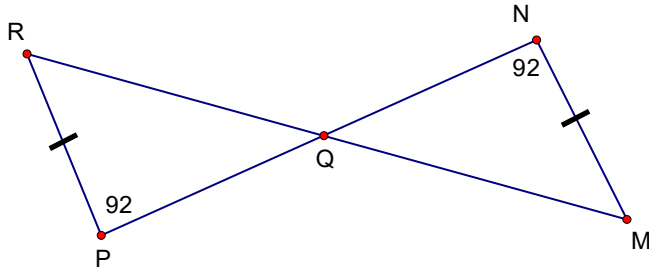
1) Identify the congruent corresponding parts in the triangles above.

Recall: Third Angles Theorem	
<p>If two angles of one triangle are congruent to two angles of another triangle, then the third angles are also congruent.</p>	 <p>If $\angle A \cong \angle D$ and $\angle B \cong \angle E$, then $\angle C \cong \angle F$.</p>

2) Given that $\triangle ABD \cong \triangle FED$, solve for x and y .

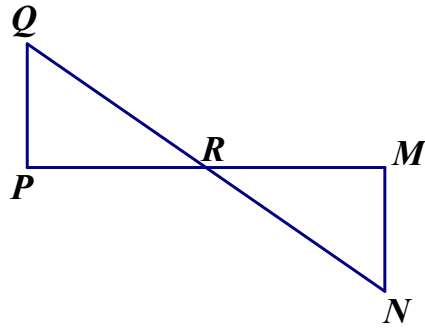


3) Given $\triangle PQR \cong \triangle NQM$, prove that Q is the midpoint of \overline{RM} .



4) **Given:** $\angle P$ and $\angle M$ are right angles
 R is the midpoint of \overline{PM}

Prove: $\overline{MN} \cong \overline{PQ}$, $\overline{QR} \cong \overline{NR}$



- 5) **Given:** $\overline{MN} \cong \overline{QP}$, $\overline{MN} \parallel \overline{QP}$,
 O is the midpoint of \overline{MQ} and \overline{PN}

Prove: $\triangle MNO \cong \triangle QPO$

