| Angle - Angle <br> (AA) <br> Similarity | Side - Side - Side <br> (SSS) <br> Similarity | Side - Angle - Side <br> (SAS) <br> Similarity |
| :--- | :--- | :--- |
| If two pairs of corresponding angles from two <br> triangles are congruent, then the triangles are <br> similar. | If all three pairs of corresponding sides <br> between two triangles are proportional <br> (multiplied by the same zoom factor), then the <br> triangles are similar. | If two pairs of corresponding sides of two <br> triangles are proportional (multiplied by the <br> same zoom factor) and the included (angle <br> between) is congruent, then the triangles are <br> similar. |

Flowchart: A diagram showing an argument for a conclusion from certain evidence. A flowchart uses ovals connected by arrows to show the logical structure of the argument. When each oval has a reason stated next to it showing how the evidence leads to that conclusion, the flowchart represents a proof. See the example below.


$$
\angle A \cong \angle D \text { and } \angle B \cong E
$$

$\therefore \triangle A B C \sim \triangle D E F$



$$
\frac{D E}{A B}=\frac{12}{8}=1.5, \frac{E F}{B C}=\frac{9}{6}=1.5, \text { and } \frac{F D}{C A}=\frac{6}{4}=1.5
$$

$$
\therefore \triangle A B C \sim \triangle D E F
$$




$$
\begin{gathered}
\frac{R U}{C A}=2 \text { and } \frac{U N}{A T}=2 \\
\angle U \cong \angle A=103^{\circ}
\end{gathered}
$$

$$
\therefore \triangle R U N \sim \Delta C A T
$$



