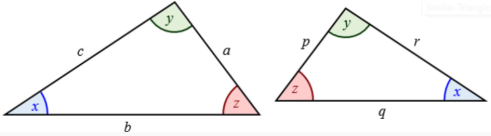
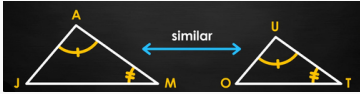
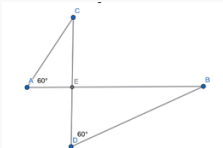
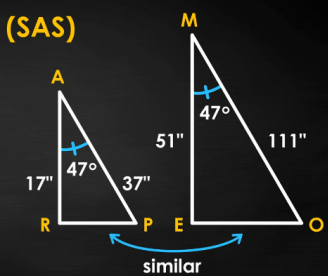
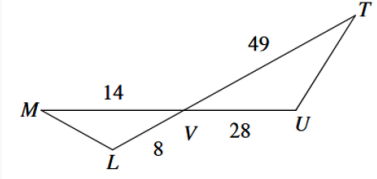
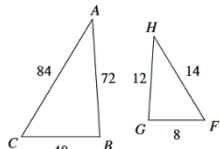


Triangle Similarity Shortcuts

SIMILARITY AND THE SHORTCUTS

Shortcut	Diagram	My notes	Worked example
	Similarity: Two figures are similar ($\sim$) if corresponding angles are congruent and corresponding side lengths are proportional.	- Same shape, but not necessarily the same size. - Corresponding angles are equal. - Corresponding sides are in the same ratio. $\frac{a}{p} = \frac{b}{q} = \frac{c}{r}$ 	
$\sim AA$			 Prove $CAE \sim BDE$
$\sim SAS$	(SAS) 		 $\triangle VUT \sim \underline{\hspace{2cm}}$ Prove the statement you write.
$\sim SSS$			Prove the two are $\sim$  $\triangle CBA \sim \underline{\hspace{2cm}}$

CORRESPONDENCE AND NOTATION

Writing Similarity Statements Correctly

If $\triangle ABC \sim \triangle DEF$ then:

$A \leftrightarrow D$ $B \leftrightarrow E$ $C \leftrightarrow F$

$\angle A = \angle D$, $\angle B = \angle E$, $\angle C = \angle F$

$AB/DE = BC/EF = AC/DF = k$

Correspondence practice:

If $\triangle PQR \sim \triangle XYZ$, list three pairs of equal angles and write the three equal ratios:

A NOTE ON PROOF

A note on proof

Each of these shortcuts can be proven from the definition of similarity and from theorems about parallel lines and angle sums. We did not prove them — we accepted them as postulates after failing to find counterexamples. This mirrors exactly what we did with SSS, SAS, and ASA in Unit 3.

Failing to find a counterexample is _____, not _____.