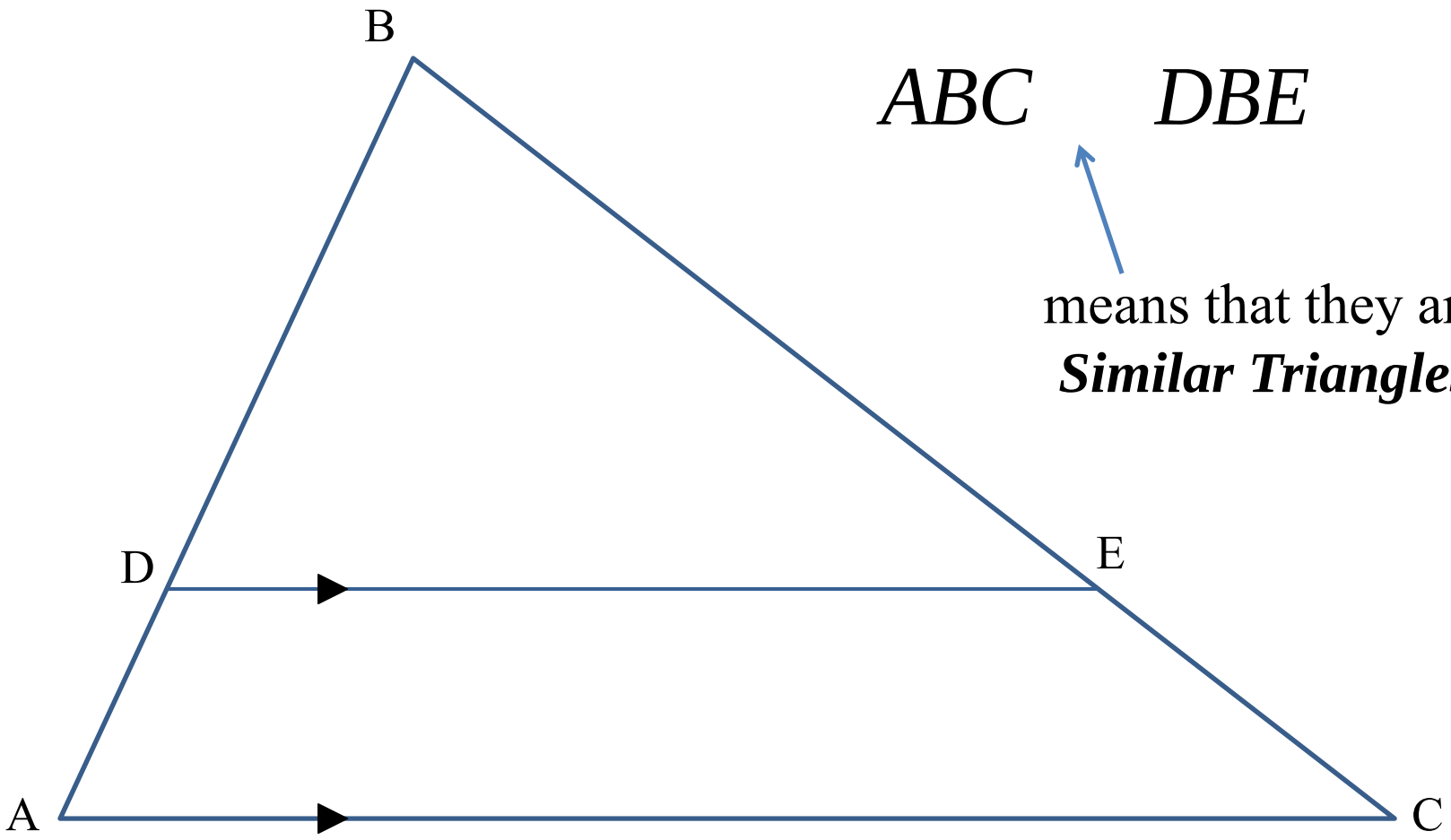
# Similar Triangles

Standards 7e & 7f



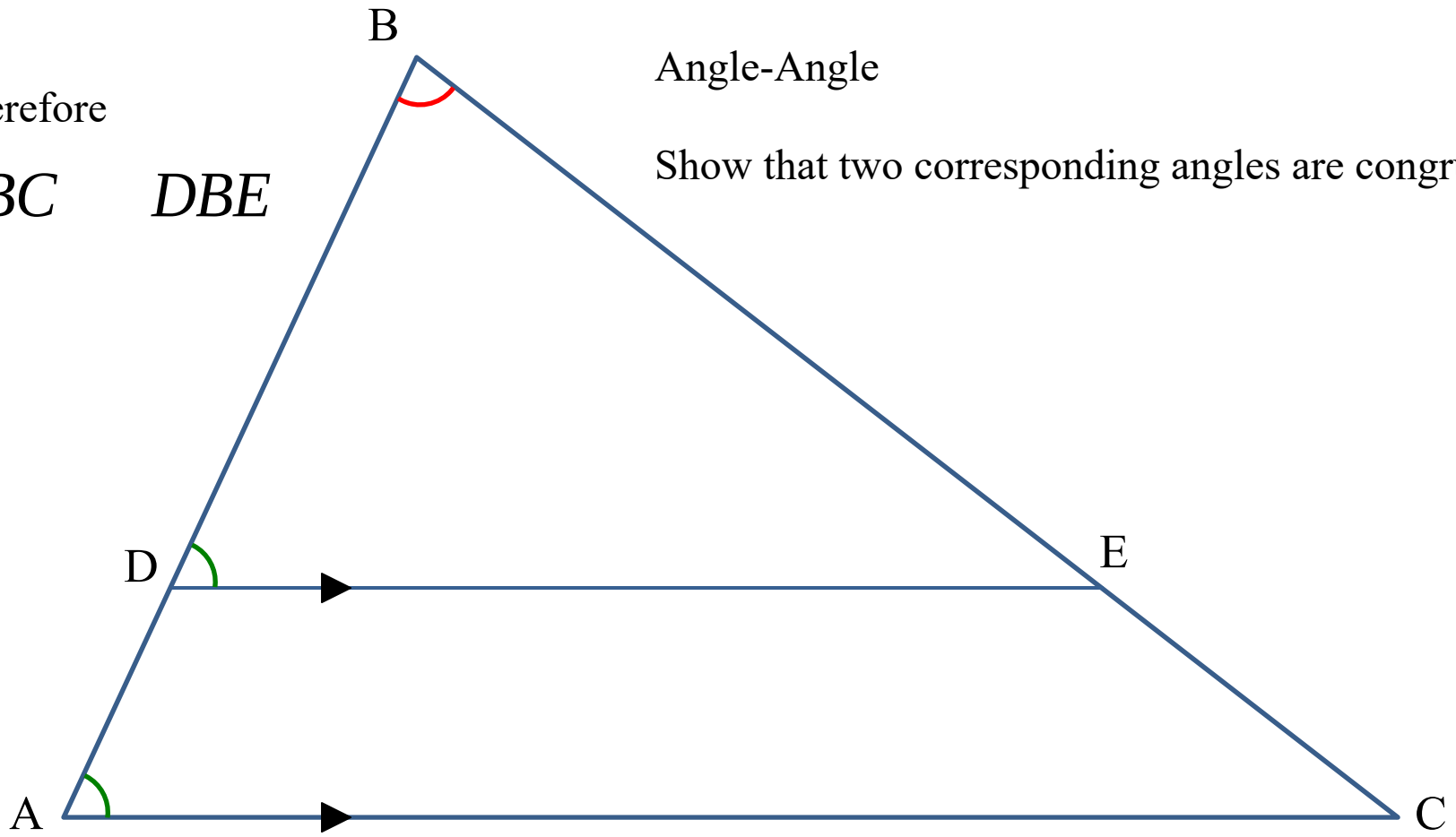

$ABC \quad DBE$

means that they are
***Similar Triangles***

How could this be proven?

Therefore

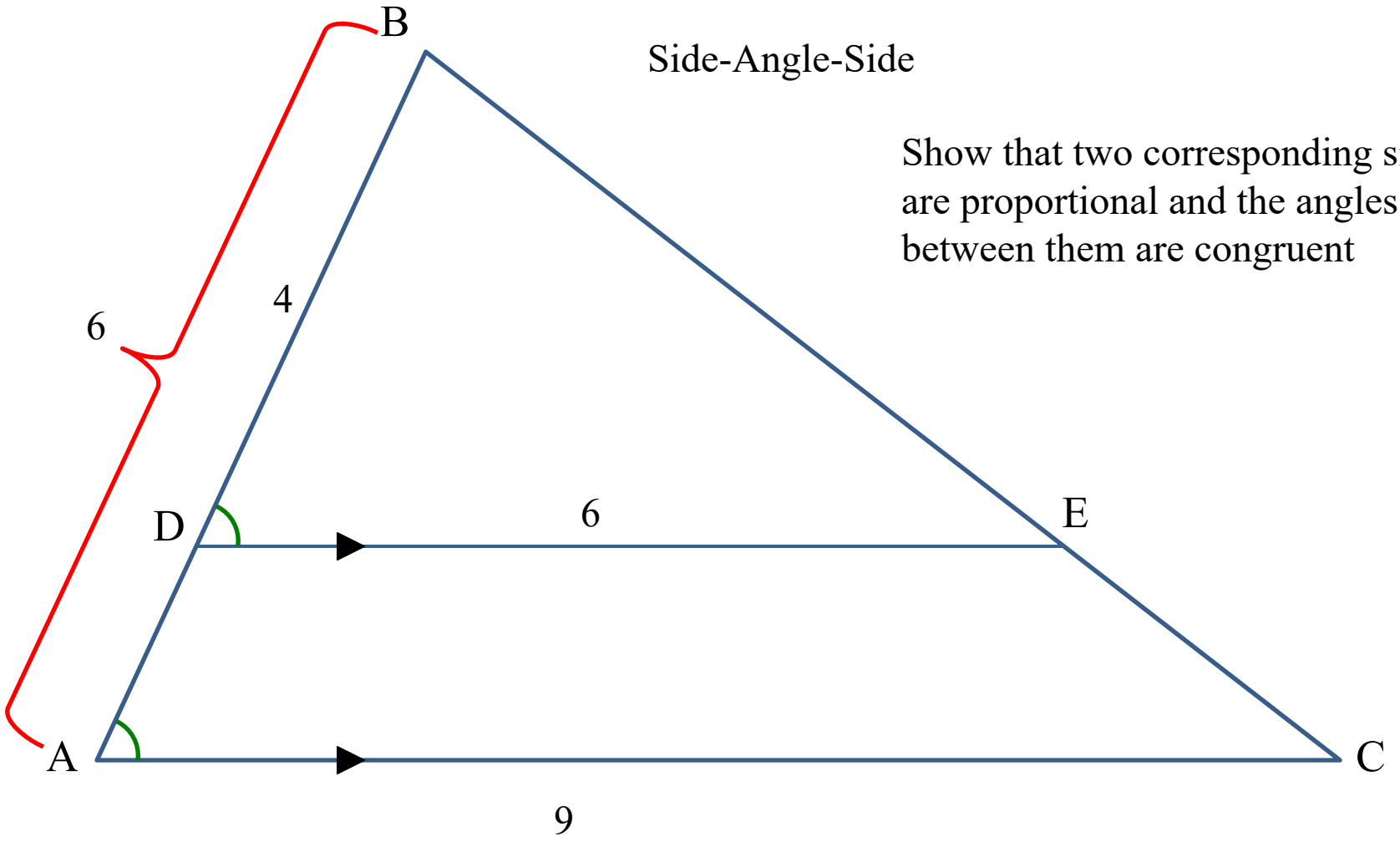
$ABC \quad DBE$




Angle-Angle

Show that two corresponding angles are congruent

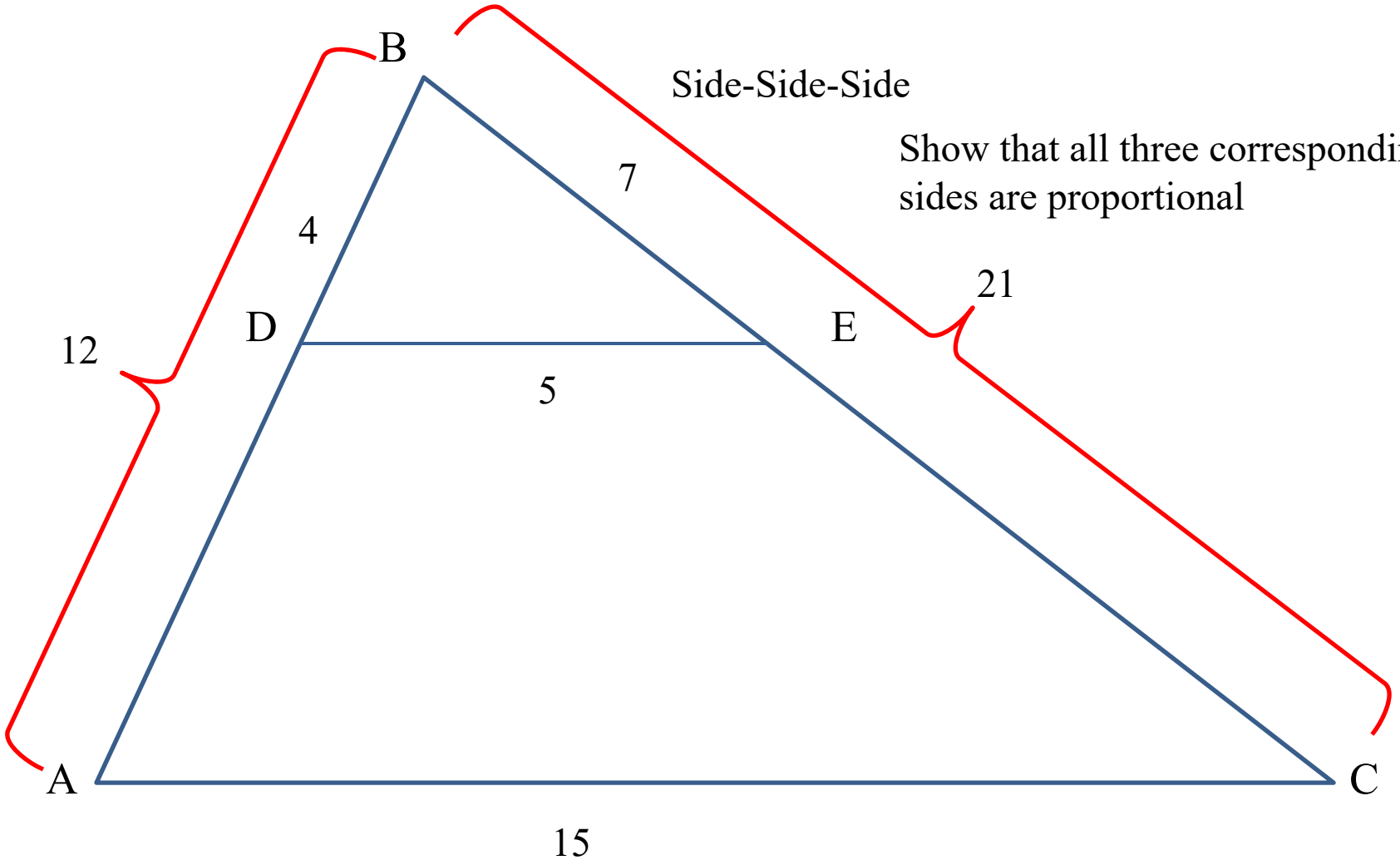
Third Angle Theorem is enough to take care of that last pair of angles




$$\frac{AB}{DB} = \frac{AC}{DE} \longrightarrow \frac{6}{4} = \frac{9}{6} = \frac{3}{2}$$

Therefore

$ABC \quad DBE$

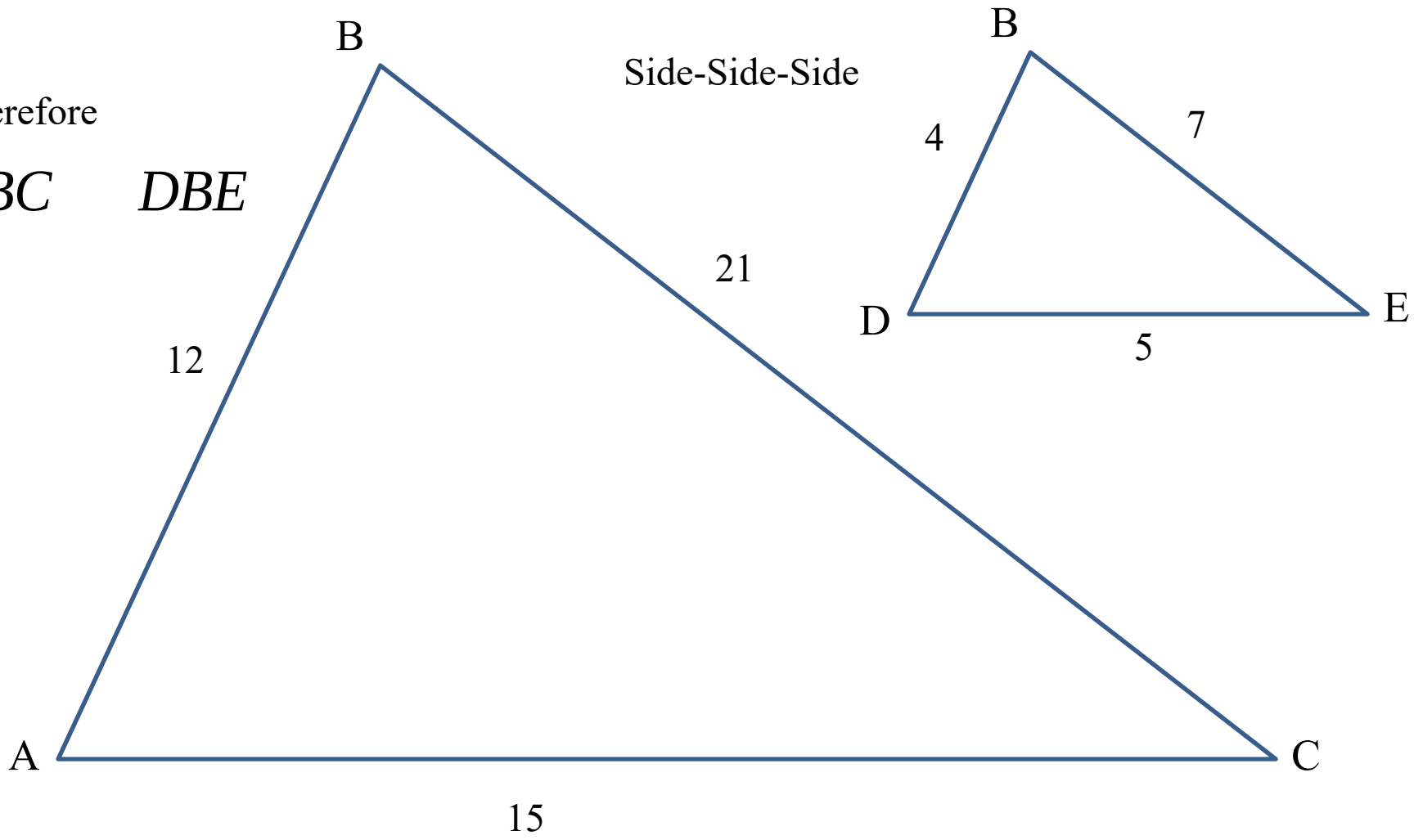



$$\frac{AB}{DB} = \frac{AC}{DE} = \frac{BC}{BE} \longrightarrow \frac{12}{4} = \frac{15}{5} = \frac{21}{7} = \frac{3}{1}$$

Therefore

$ABC \quad DBE$

Side-Side-Side




$$\frac{AB}{DB} = \frac{AC}{DE} = \frac{BC}{BE} \longrightarrow \frac{12}{4} = \frac{15}{5} = \frac{21}{7} = \frac{3}{1}$$