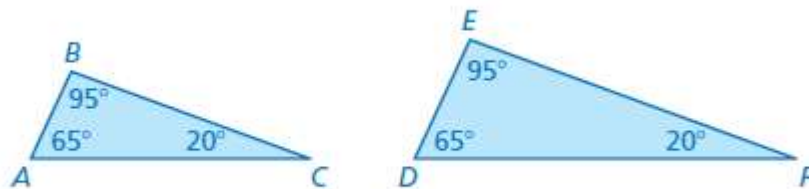


Key Idea

Angles of Similar Triangles

Words When two angles in one triangle are congruent to two angles in another triangle, the third angles are also congruent and the triangles are similar.

Example

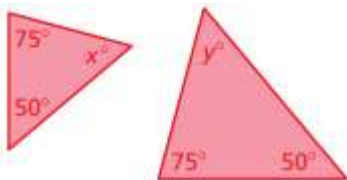


Triangle ABC is similar to Triangle DEF : $\triangle ABC \sim \triangle DEF$.

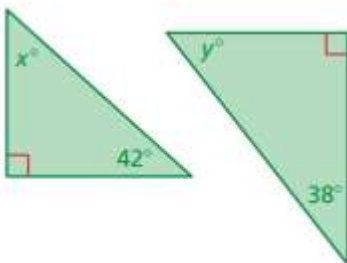
Ex.) Tell whether the triangles are similar. Explain.

Notes:

a.



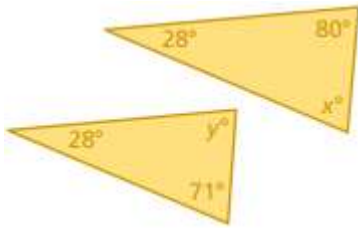
b.



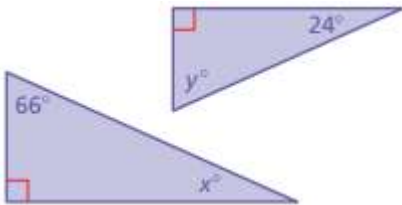
OYO:) Tell whether the triangles are similar. Explain.

Notes:

a.

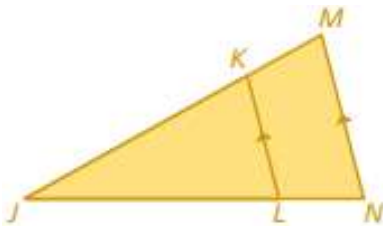


b.



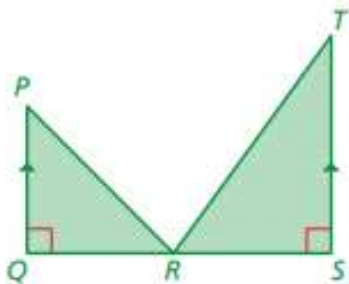
Ex:) Can you determine whether $\triangle JKL$ and $\triangle JMN$ are similar? Explain.

Notes:



OYO:) Can you determine whether $\triangle PQR$ and $\triangle TSR$ are similar? Explain.

Notes:



_____ uses similar figures to find a missing measure when it is difficult to find directly.

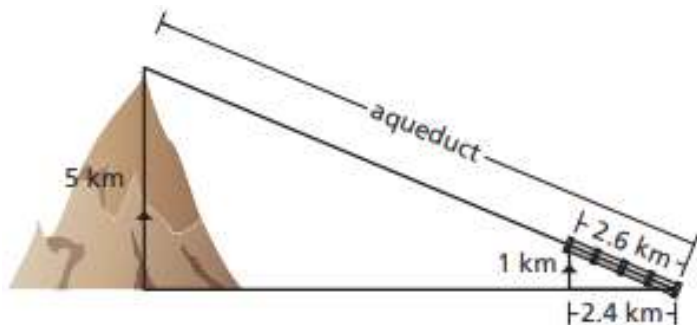
Ex:) You plan to cross a river and want to know how far it is to the other side. You take measurements on your side of the river, and make the drawing shown. What is the distance x across the river?

Notes:



Ex:) Engineers plan to construct an aqueduct to transport water from the top of a ridge of farmland. A portion of the project is complete. Find the length of the entire aqueduct.

Notes:



OYO:) You want to go on a swamp tour. How long does it take a swamp vehicle that travels at 3.2 miles per hour to travel across the swamp, from point Z to point Y? Justify your answer.

Notes:

