

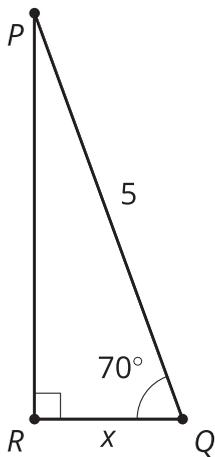
Unit 4 Lesson 8: Sine and Cosine in the Same Right Triangle

1 Which One Doesn't Belong: Four Triangles (Warm up)

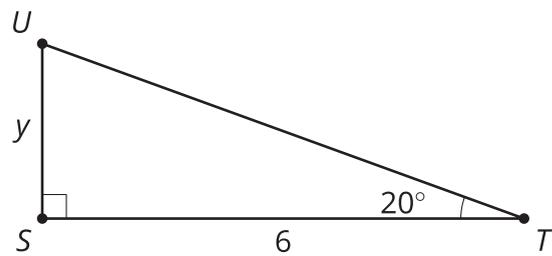
Student Task Statement

Which one doesn't belong?

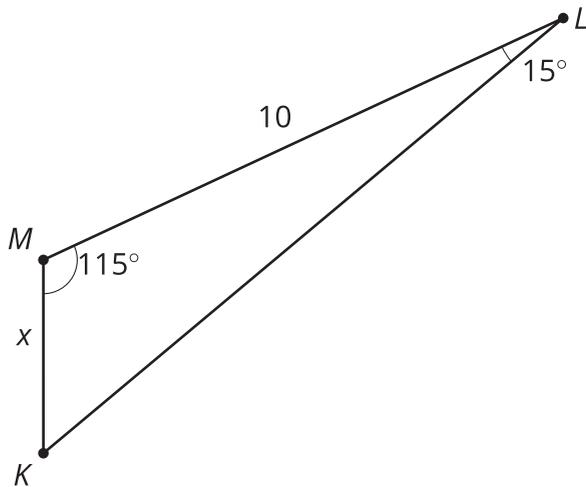
A



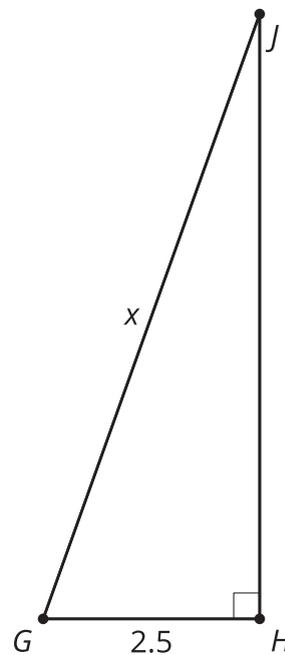
B



C



D



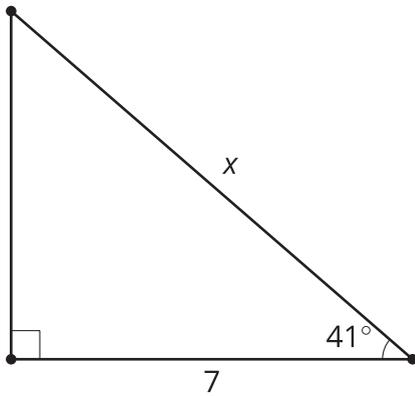
2 Twin Triangles

Student Task Statement

Your teacher will assign you to either Column A or Column B. Find the value of the variable for the problems in your column.

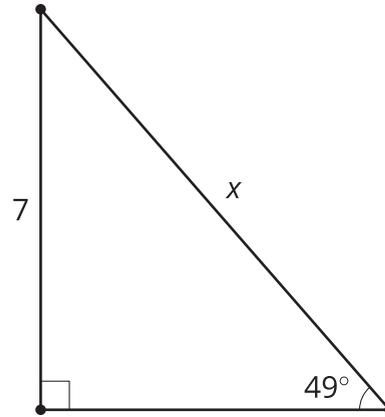
Column A:

A1

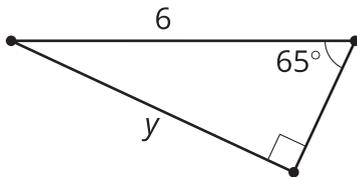


Column B:

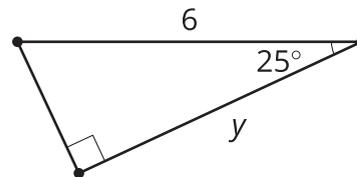
B1



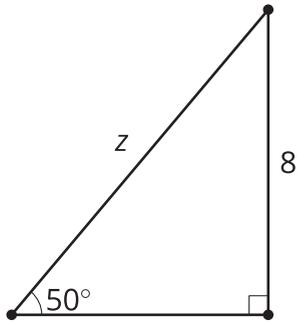
A2



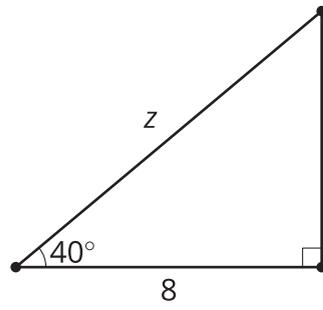
B2



A3



B3



Compare your solutions with your group's solutions. Why did you get the same answers to different problems?

3 Explain the Co-nection

Student Task Statement

1. Draw a diagram that will help you explain why $\sin(\theta) = \cos(90 - \theta)$.
2. Explain why $\sin(\theta) = \cos(90 - \theta)$.

Discuss your thinking with your group. If you disagree, work to reach an agreement.

Create a visual display that includes:

- A clearly-labeled diagram.
- An explanation using precise language.

Images for Activity Synthesis

