

Mathematics

# Similar Triangles

## Lesson 6 of 8

Downloadable Resource

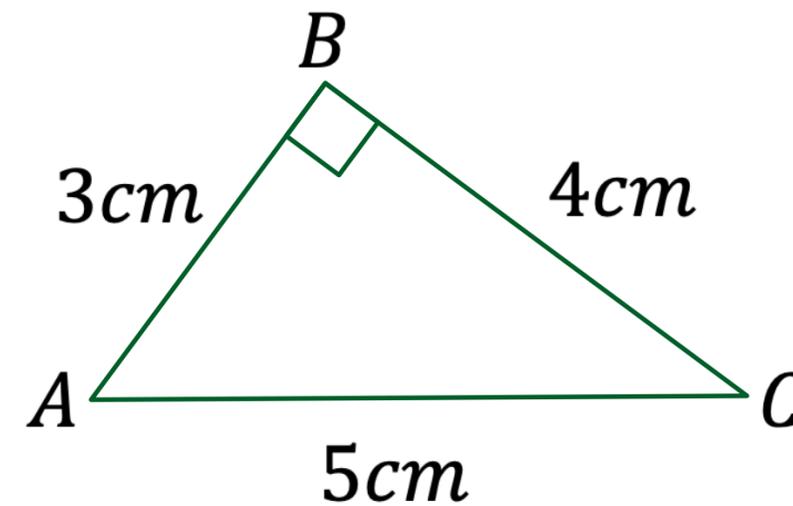
Miss Kidd-Rossiter



## Try this

Describe the relationship between

i)  $AB$  and  $BC$  ii)  $AB$  and  $AC$  iii)  $AC$  and  $BC$

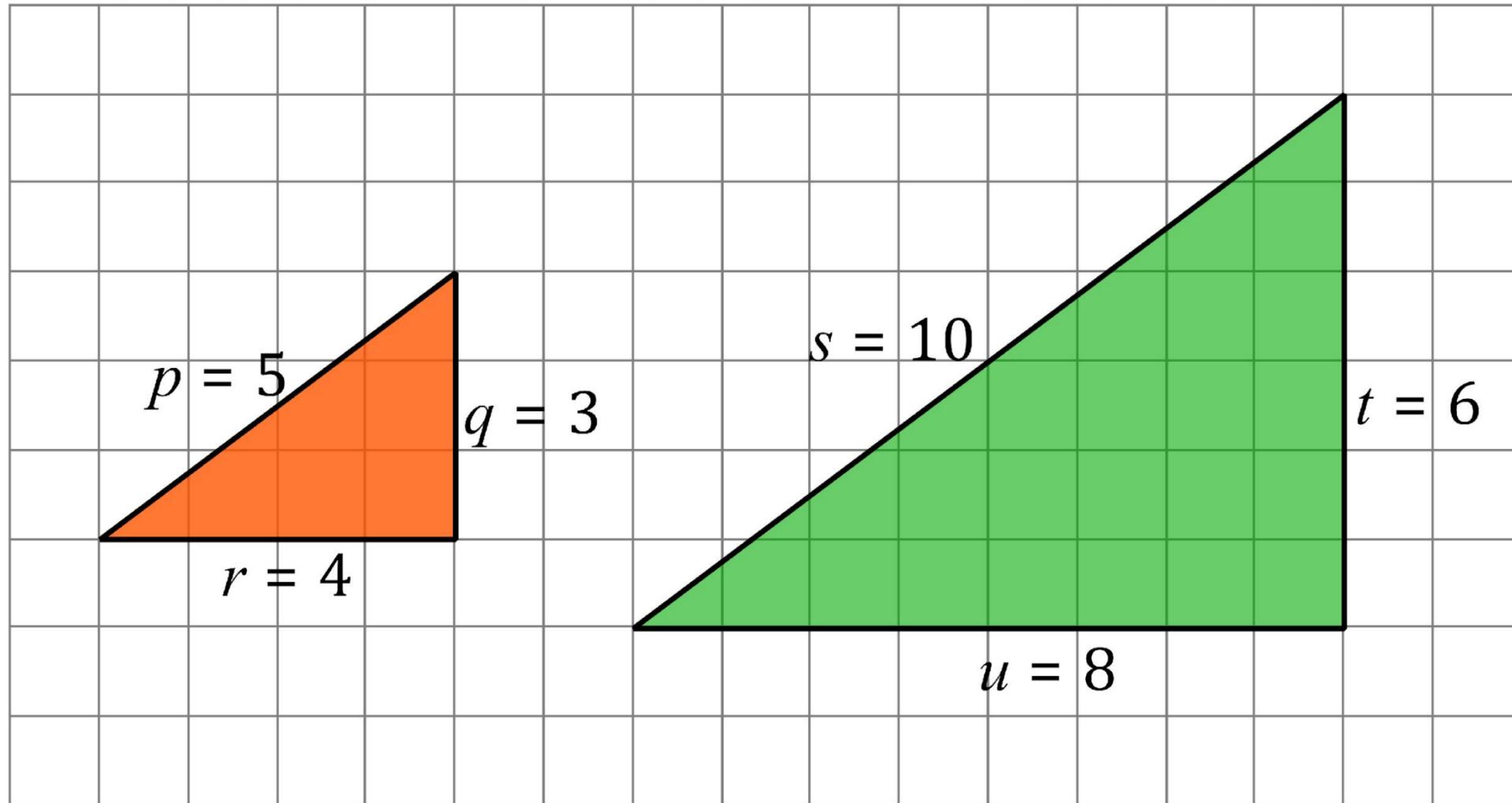


Enlarge the triangle by scale factor 2, 3.5, 0.5.

What do you notice about the relationships between the three sides?



# Connect

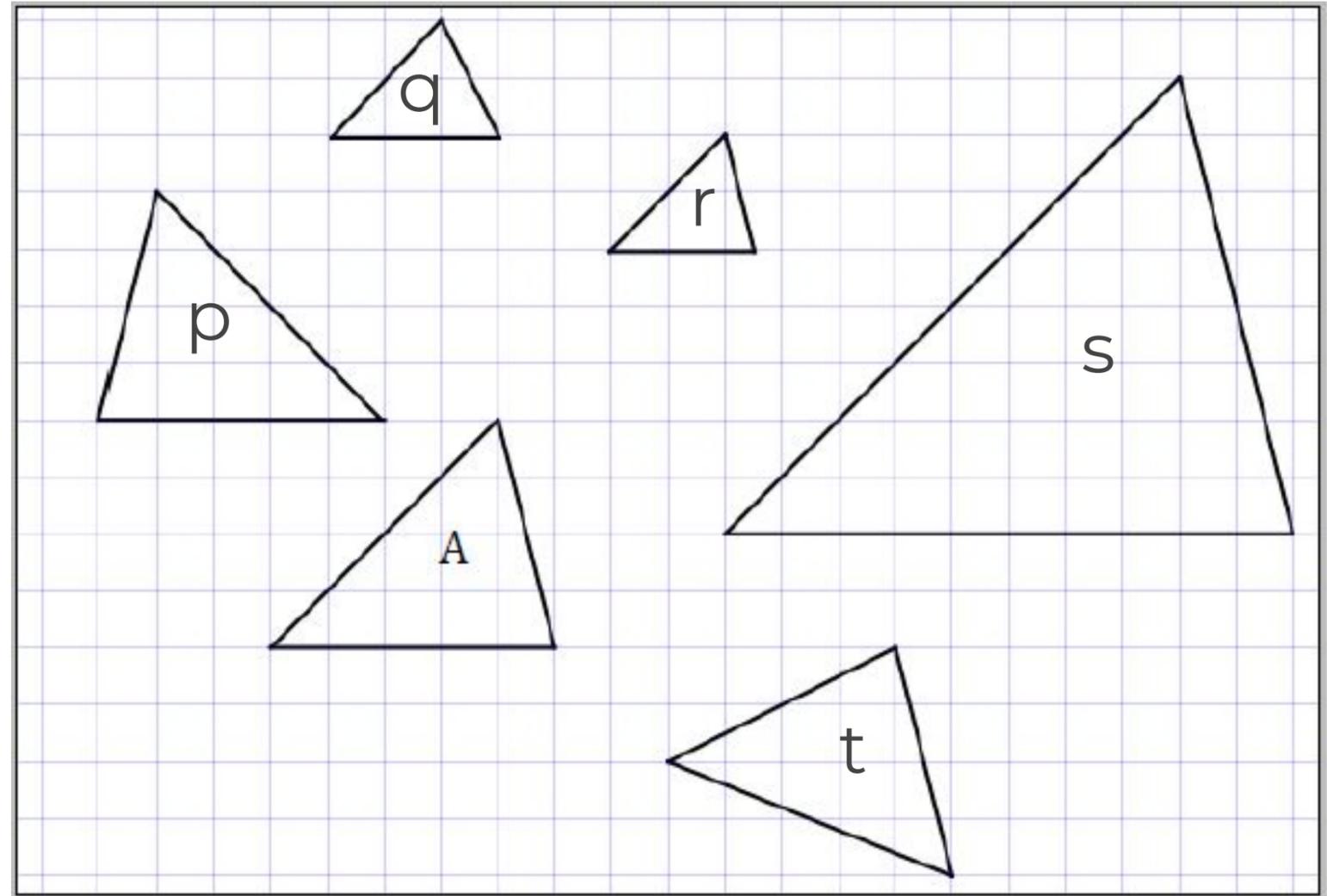


What's the **same**?  
What's **different**?



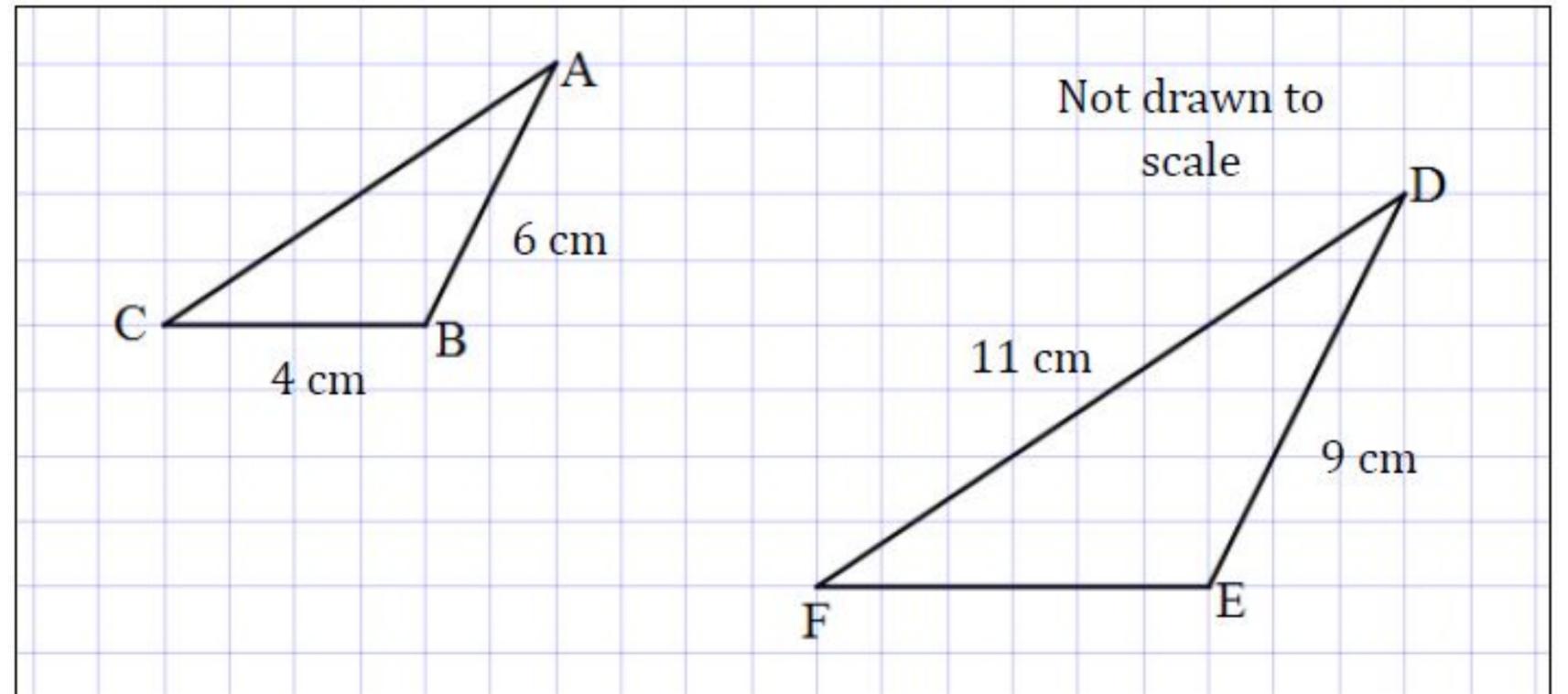
# Independent task

1. Which triangles are similar to A?



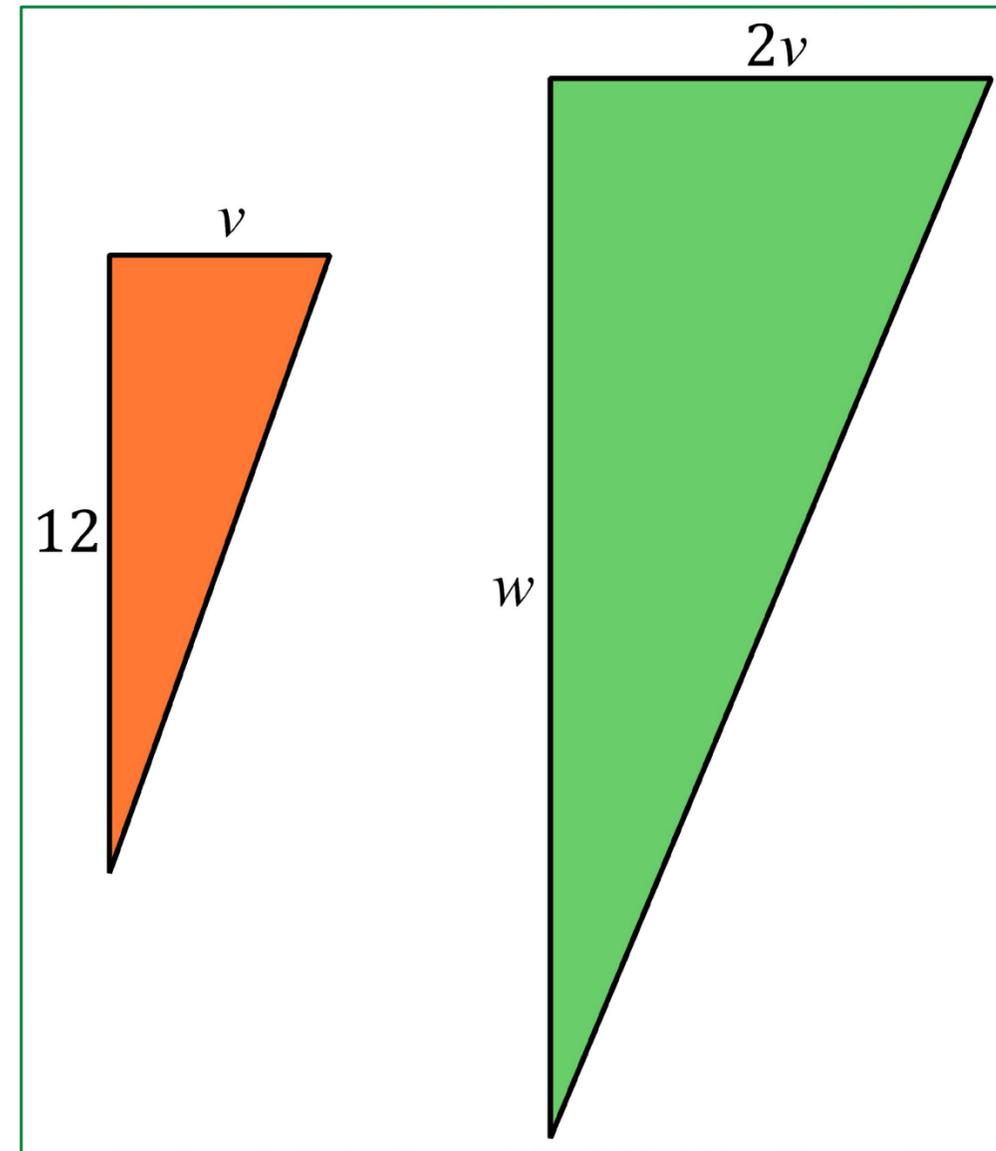
# Independent task

2. Triangle ABC and DEF are similar.
- Triangle DEF is an enlargement of triangle ABC. What is the scale factor of this enlargement?
  - Work out the length of the side EF.
  - What is the length of the side AC?



# Independent task

3. These triangles are similar. Work out the value of  $w$ .



# Explore

If you enlarge **any** shape by **any** scale factor you end up with two similar shapes



Is the student correct? How do you know?

