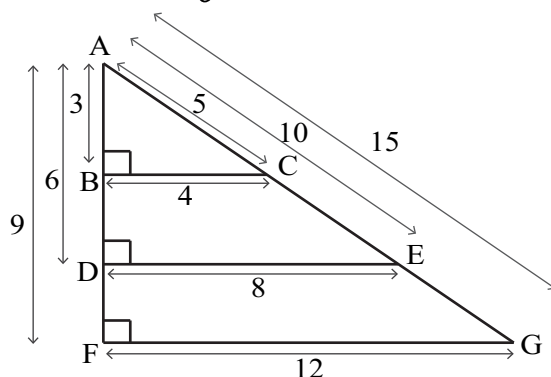


# Similarity Worksheet 4



**Figure 1**

Refer to Figure 1 for questions 1 - 3.

1. Find and compare the ratios of the side opposite  $\angle A$  to the hypotenuse.
2. Find and compare the ratios of the side adjacent to  $\angle A$  to the hypotenuse.
3. Find and compare the ratios of the side opposite  $\angle A$  to the angle's adjacent side.

For questions 4-5, use the following information. A right triangle has a hypotenuse of 17 and an angle of  $76^\circ$  opposite leg  $a$ .

4. What is the length of leg  $a$ ?
5. What is the length of the other leg,  $b$ ?

For questions 6-7, use the following

information. A right triangle has a hypotenuse of 43 and an angle of  $61^\circ$  opposite leg  $f$ .

6. What is the length of leg  $f$ ?
7. What is the length of the other leg,  $g$ ?

For questions 8-9, use the following information. A right triangle has legs  $a$  and  $b$  and a hypotenuse  $c$ . The value of  $b = 8$ . The angle opposite  $a$  is

8. What is the length of leg  $a$ ?
9. What is the length of hypotenuse  $c$ ?

10. A right triangle has a hypotenuse of 16 and a side length opposite  $\theta$  of 12. What is the value of  $\theta$ ?

