

**Apprenticeship Math 12**  
**ASSIGNMENT: Similar Triangles Intro**

Name: \_\_\_\_\_

Date: \_\_\_\_\_

**Please show your work. If necessary, round to the nearest tenth.**

1. Each pair of triangles are similar. Calculate the indicated lengths.

a)

$a =$  \_\_\_\_\_  
 $b =$  \_\_\_\_\_

b)

$a =$  \_\_\_\_\_  
 $b =$  \_\_\_\_\_

c)

$a =$  \_\_\_\_\_  
 $b =$  \_\_\_\_\_

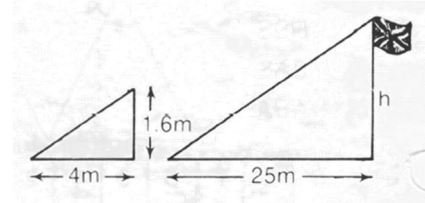
e)

$a =$  \_\_\_\_\_  
 $b =$  \_\_\_\_\_

f)

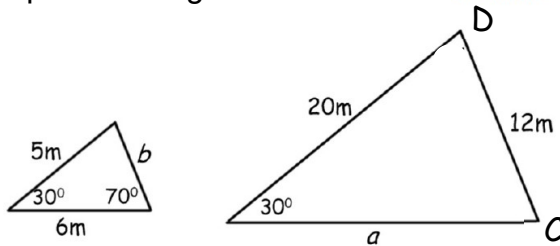
$a =$  \_\_\_\_\_  
 $b =$  \_\_\_\_\_

2. A flagpole casts a shadow 25 m long. If a woman who is 1.6 m tall casts a shadow 4 m long at the same time and at the same location, how tall is the flagpole?



3. Each pair of triangles are similar. Calculate the indicated lengths and angles.

a)



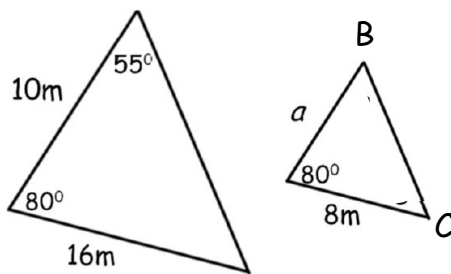
$a = \underline{\hspace{2cm}}$

$b = \underline{\hspace{2cm}}$

$\angle C = \underline{\hspace{2cm}}$

$\angle D = \underline{\hspace{2cm}}$

b)



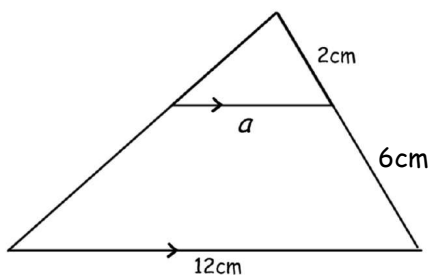
$a = \underline{\hspace{2cm}}$

$\angle B = \underline{\hspace{2cm}}$

$\angle C = \underline{\hspace{2cm}}$

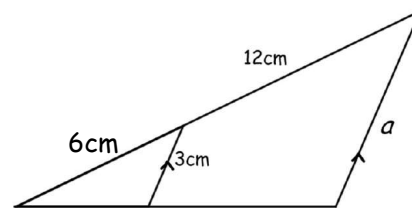
4. Calculate the indicated lengths.

a)



$a = \underline{\hspace{2cm}}$

b)



$a = \underline{\hspace{2cm}}$