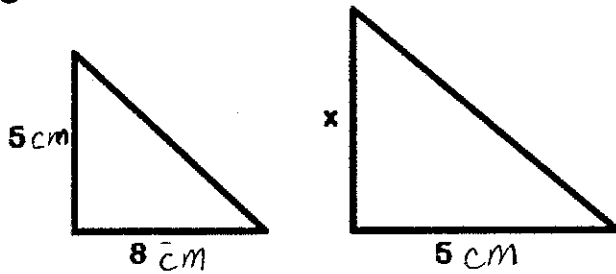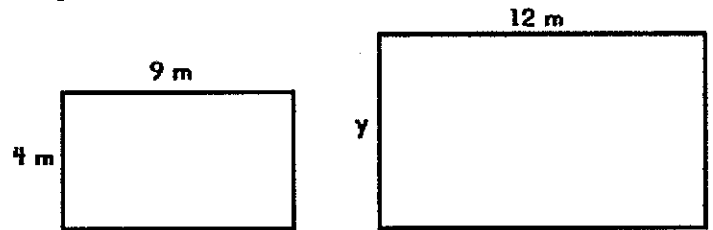## Proportions and Similar Figures – Find Someone Who

Directions: 1. You ask the question.
2. You record as your partner directs you.
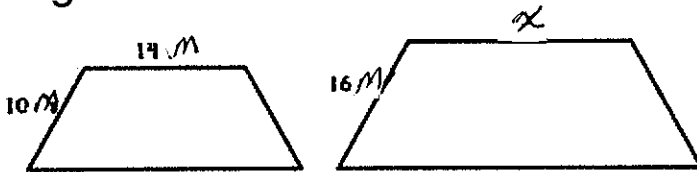3. Your partner initials once they have given you the final answer.

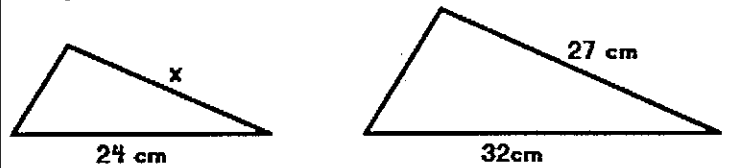|	
1) The figures are similar. Find the missing length.	**2)** The figures are similar. Find the missing length.

For 1): triangle with $5\ cm$ and $8\ cm$; larger triangle with x and $5\ cm$.

For 2): rectangle $9\ m$ by $4\ m$; larger rectangle $12\ m$ by y.

3) The figures are similar. Find the missing length.

trapezoid with $14\ M$ and $10\ M$; larger trapezoid with x and $16\ M$.

4) The figures are similar. Find the missing length.

triangle with x and $24\ cm$; larger triangle with $27\ cm$ and $32\ cm$.

5) The scale of a map is 1 cm : 100 m. Find the map distance if the actual distance is 750 m.
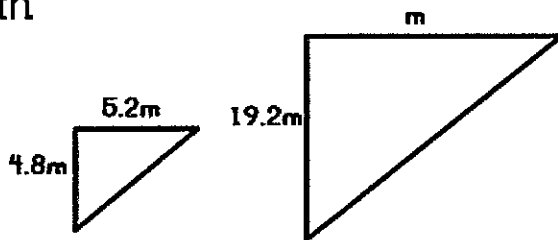
6) The scale of a map is **1 in. : 17.5 mi.** Find the actual distance if the map distance is **5 in.**

| **7)** A tree casts a shadow that is 10 feet long. A 5 foot woman standing nearby casts a shadow that is 4 feet long. How tall is the tree?	**8)** Two rectangles are similar. The first is 6 in. wide and 4 in. long. The second is 9 in. wide. Find the length of the second rectangle.

SOLO. Try these independently.

1) The figures are similar. Find the missing length.	**2)** The figures are similar. Find the missing length.
5.2m 19.2m 4.8m m	120 m x 12 m 18 m
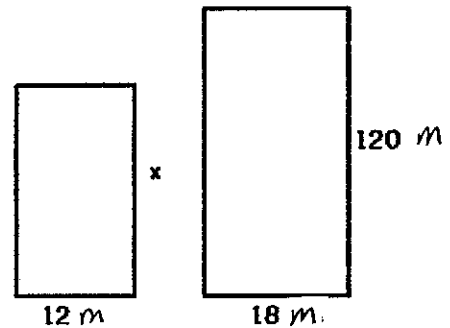
3) The scale of a map is **0.25 cm : 15 km**. Find the actual distance if the map distance is **2 cm**.	**4)** A scale model of a train is being made. The actual train is 5 meters tall, 27 meters long and 3 meters wide. If the scale model is 40.5 centimeters long, how wide is the scale model?

5) A tree casts a shadow 9 meters long. A 54 meter tall building nearby casts a shadow that is 24 meters long. What is the height of the tree?	**6)** Two isosceles triangles are similar. The first triangle has two sides that measure 6 in. and one side that is 5 in. The second triangle has two sides that measure 3 in. What is the length of the missing side on the second triangle?