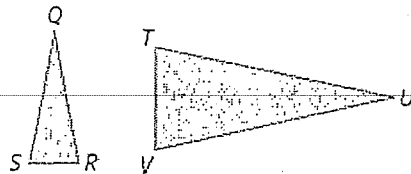
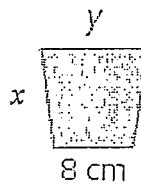
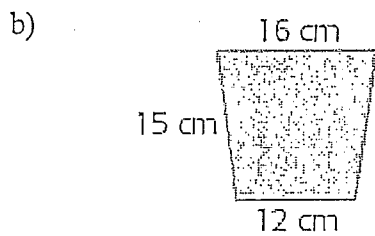
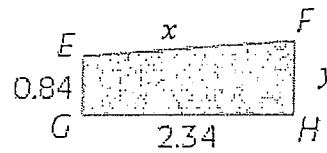
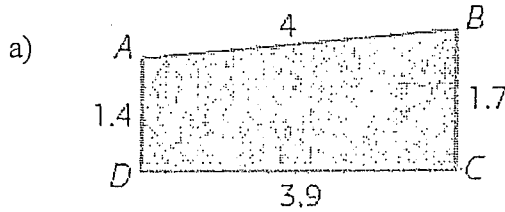


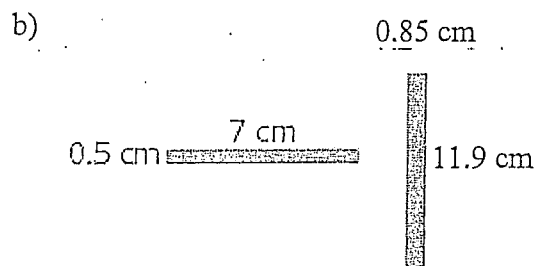
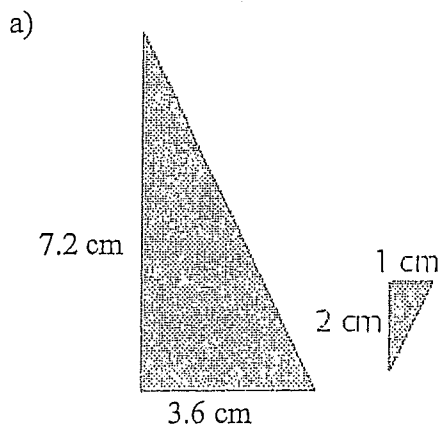
1. List the corresponding sides and angles in these similar polygons.



2. Given the similar figures below, calculate the length of x and y .

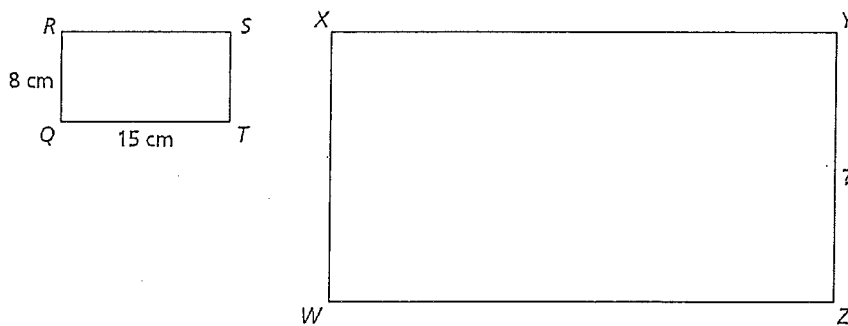


3. Determine the scale factor for each pair of similar figures below.

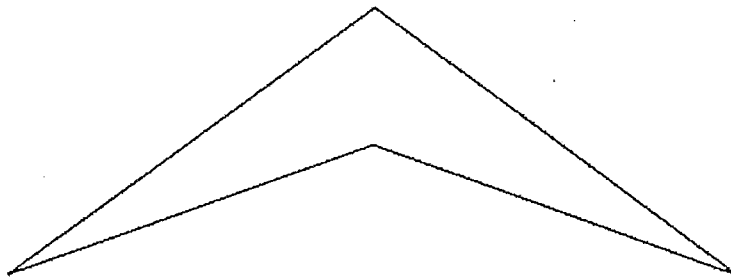


4. a) Quadrilateral X is similar to quadrilateral Y. Quadrilateral X has a side that is 15 cm long. The corresponding side in quadrilateral Y is 52.5 cm long. What is the scale factor?
- b) Quadrilateral X also has a side that measures 20 cm. How long is the corresponding side of quadrilateral Y?
- c) Quadrilateral X has an angle that measures 80° . What is the measurement of the corresponding angle in quadrilateral Y?

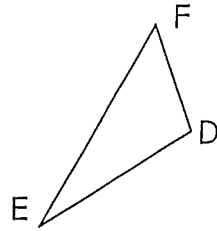
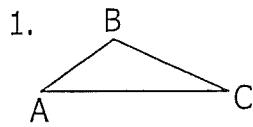
5. The ratio of lengths of corresponding sides in rectangles $QRST$ and $WXYZ$ is 1:3.4. What are the dimensions of $WXYZ$?



6. Measure the following shape, then
7. a) draw a similar figure with a scale factor of 125%.
- b) draw a similar figure with a scale factor of 0.6.



8. On a blueprint, a bedroom has dimensions of 20cm by 25cm. The blueprint has a scale factor of 1:20. What is actual area of the bedroom?
9. A flagpole casts a 2.4 m shadow at the same time that a 0.8 m garden stake casts a 0.4 m shadow. How tall is the flagpole?
10. A design that is 12 cm wide by 20 cm long will be enlarged to make a poster 45 cm wide. How long will the poster be?

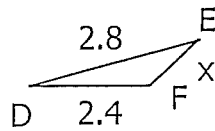
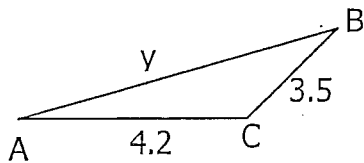


List the pairs of corresponding sides
List the pairs of corresponding angles

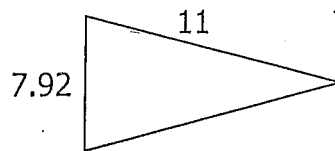
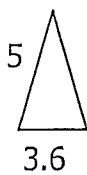
_____ corresponds to _____
_____ corresponds to _____
_____ corresponds to _____

\angle _____ corresponds to \angle _____
 \angle _____ corresponds to \angle _____
 \angle _____ corresponds to \angle _____

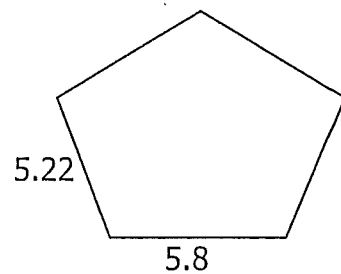
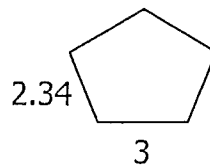
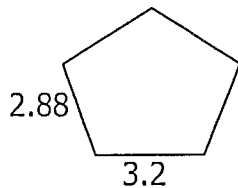
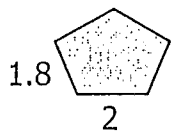
2. Given the similar figures below, calculate the length of x and y.



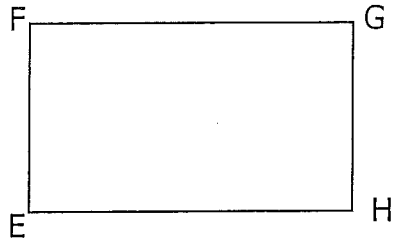
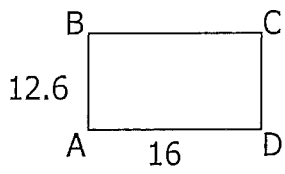
3. Determine the scale factor for the enlargement.



4. Which polygon is similar to the shaded figure? Justify your answer.



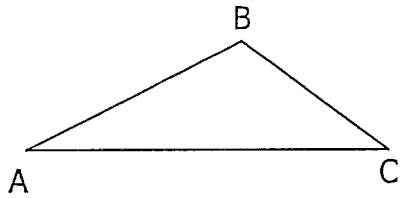
5. The ratio of corresponding sides in the similar rectangles below is 1: 2.4
 Determine the length and width of the enlarged rectangle.



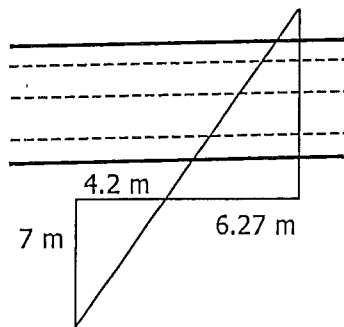
EF =

EH =

6. Measure the sides and angles of the following shape.
 Draw a similar figure with a scale factor of 150%. Show all work.

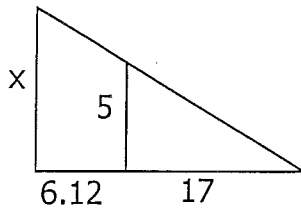


7. This scale diagram shows a surveyor's measurement taken to determine the distance across the river. What is the approximate distance across the river?

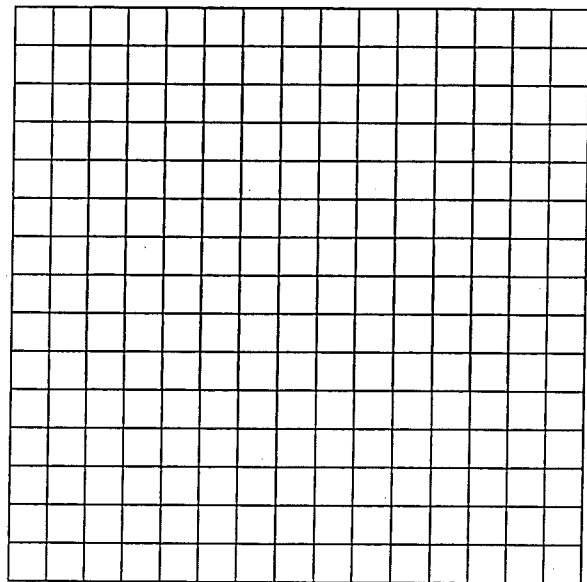
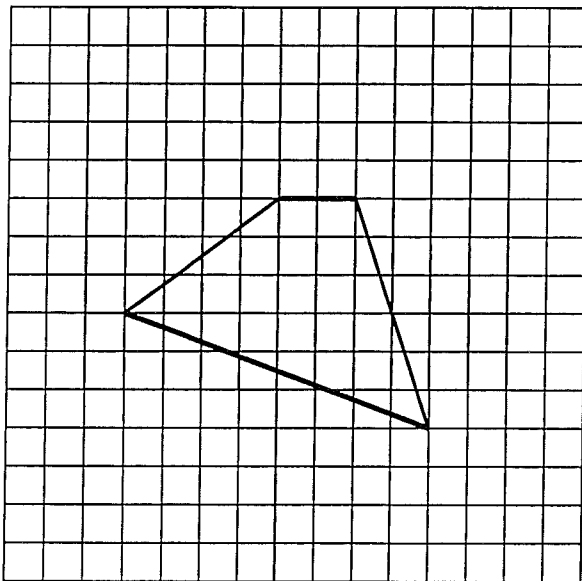


8. A gardener, 1.8 m tall, casts a shadow 4.32 m long. At the same time, a tree casts a shadow 10.8 m long. Find the height of the tree. Sketch and label a diagram. Show your work.

9. Calculate the length of x . Show your work.



10. Sketch the figure below left at a scale of 150%



11. Two ladders, one 10 m long and the other 13.2 m long, lean against the same wall at the same angle. If the shorter ladder rests 8 m up the wall, how much higher up the wall does the taller ladder rest? Sketch and label a diagram.

12. How far is Blake from the tree? Find the length of PQ first

