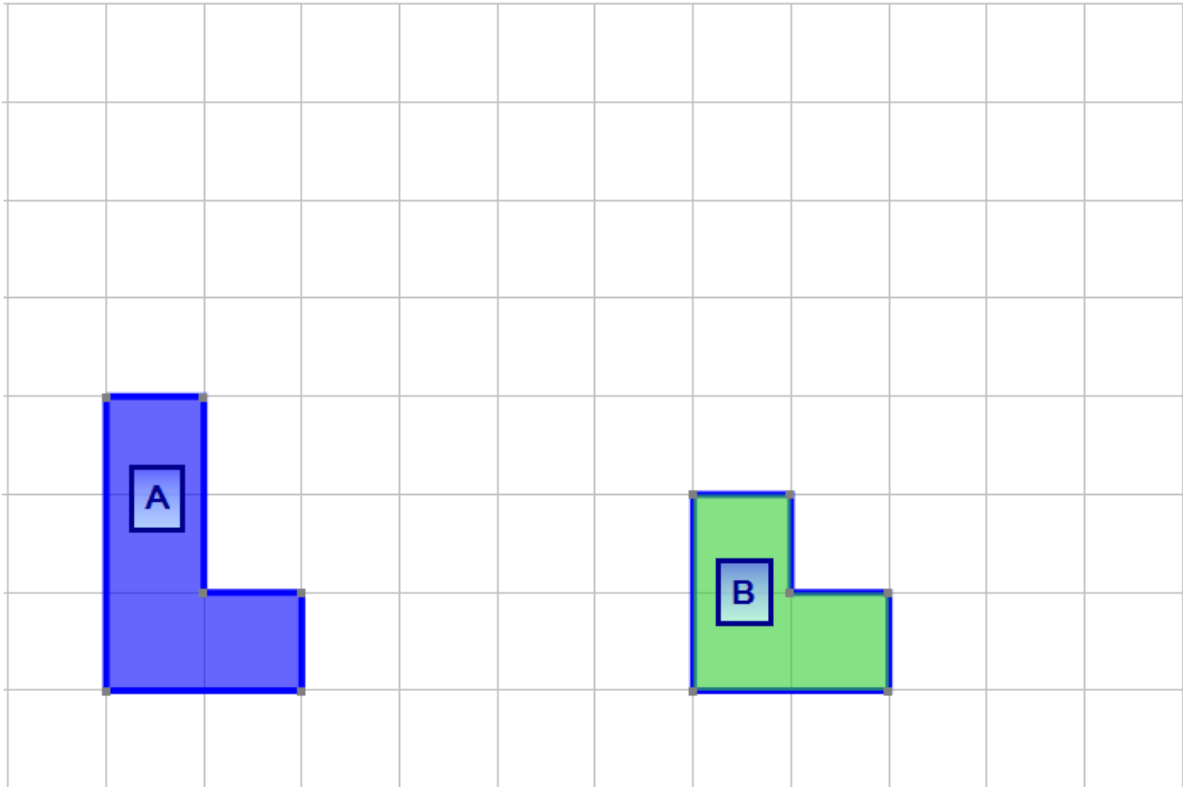
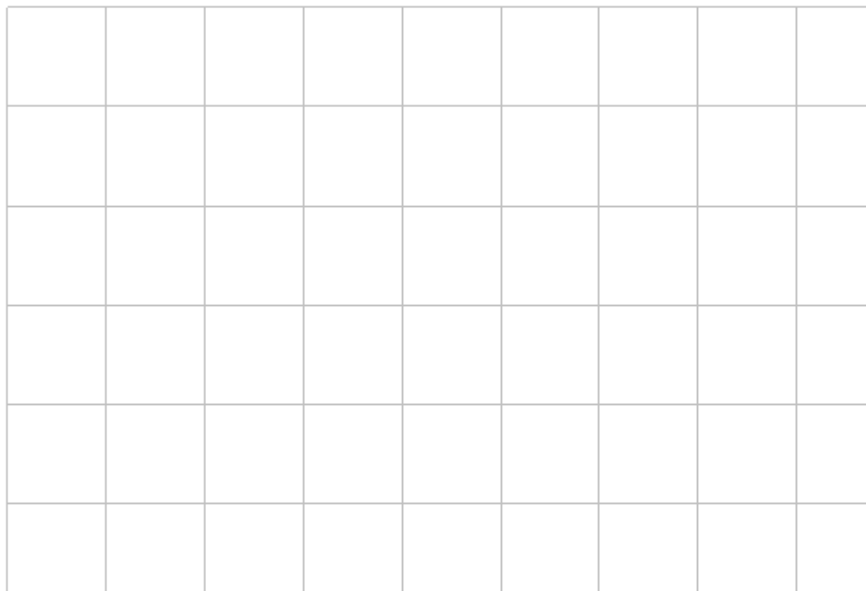


Worksheet on Enlargements. Years 7-11.

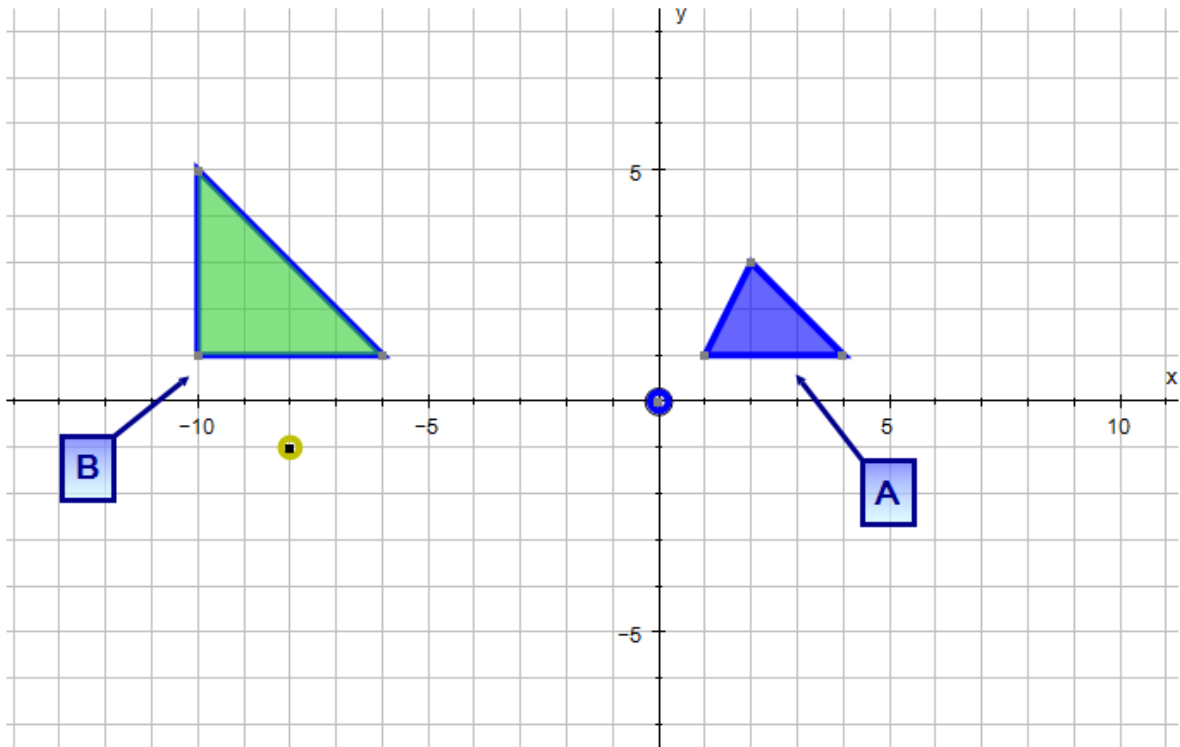
1. (a) Enlarge shape A below by a scale factor 2. Label the image C.
- (b) Enlarge shape B below by a scale factor $1\frac{1}{2}$. Label the image D.
- (c) What is the ratio of the area of shape A to the area of shape C?



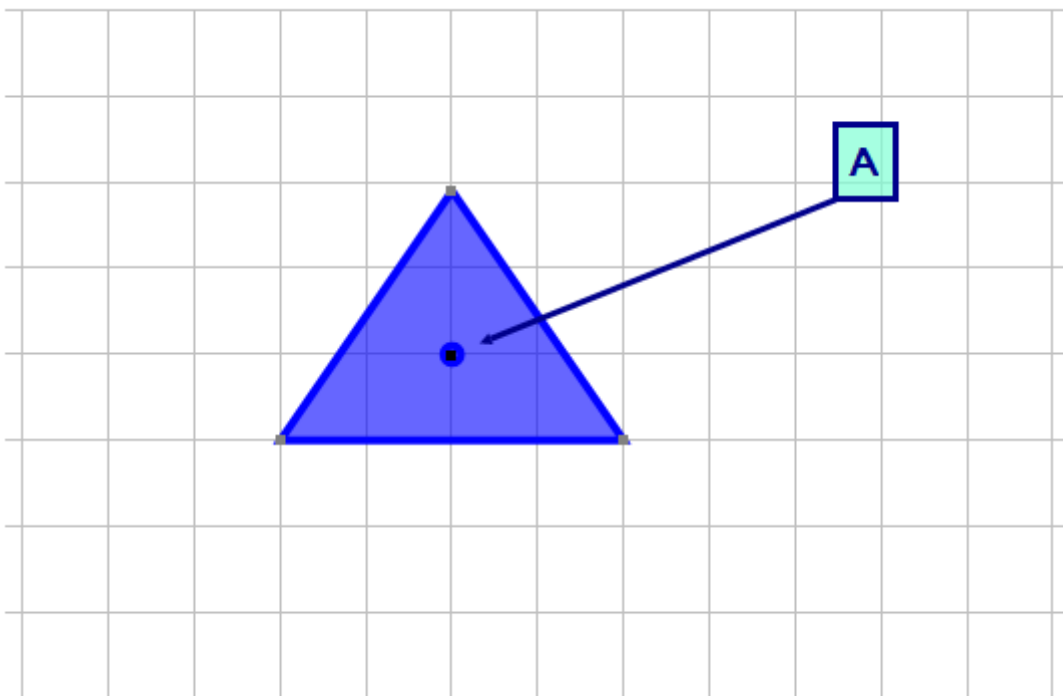
2. Draw a shape and ask your friend to enlarge it by a scale factor of 1.5.



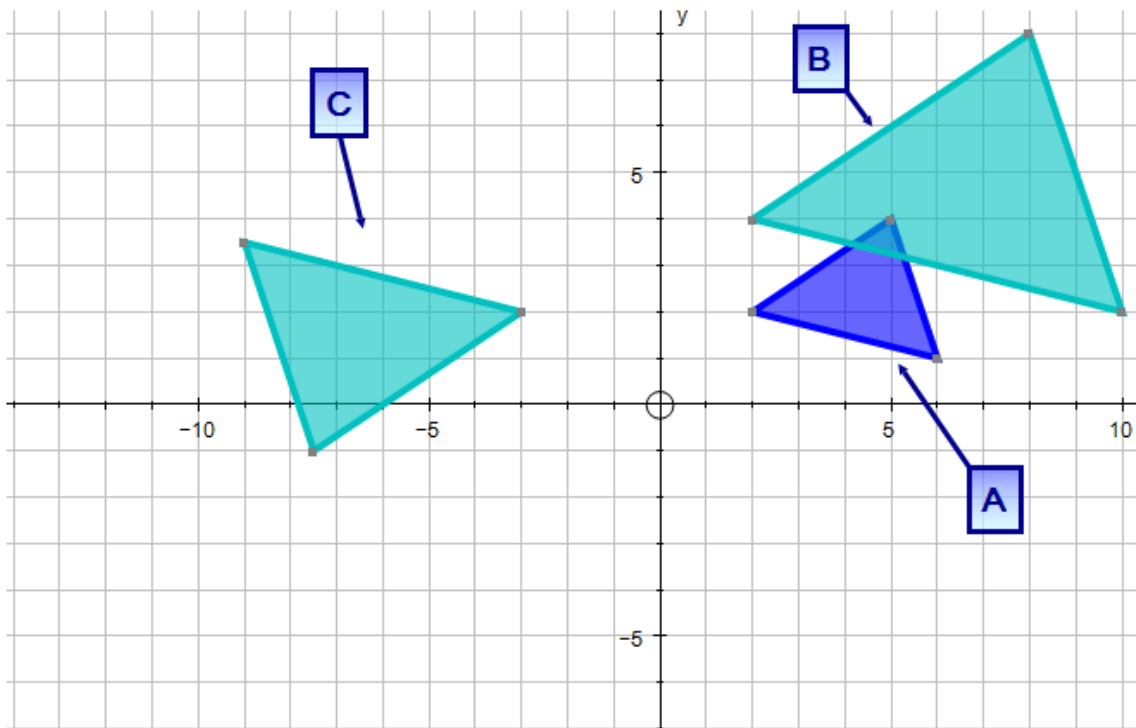
3. (a) Enlarge shape A scale factor 2 centre, origin. Label the image T.
- (b) Enlarge shape A scale factor -2 centre, origin. Label the image U.
- (c) Enlarge shape B scale factor $1\frac{1}{2}$ centre, $(-8,-1)$. Label the image W.



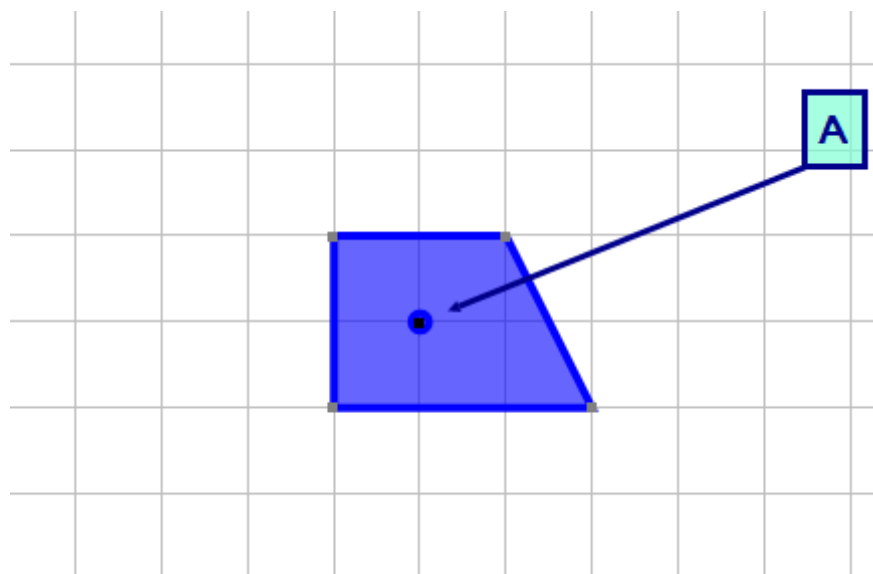
4. Enlarge the shape below scale factor 2, centre the point A.



5. (a) Shape A has been enlarged to give shape B. Write down the coordinates of the centre of enlargement and the scale factor.
- (b) Shape A has been enlarged to give shape C. Write down the coordinates of the centre of enlargement and the scale factor.
- (c) What is the ratio of the area of shape A to the area of shape B?
- (d) What is the ratio of the area of shape A to the area of shape C?
- (e) What can be said about the angles in shape A compared to the angles in shape B and shape C?

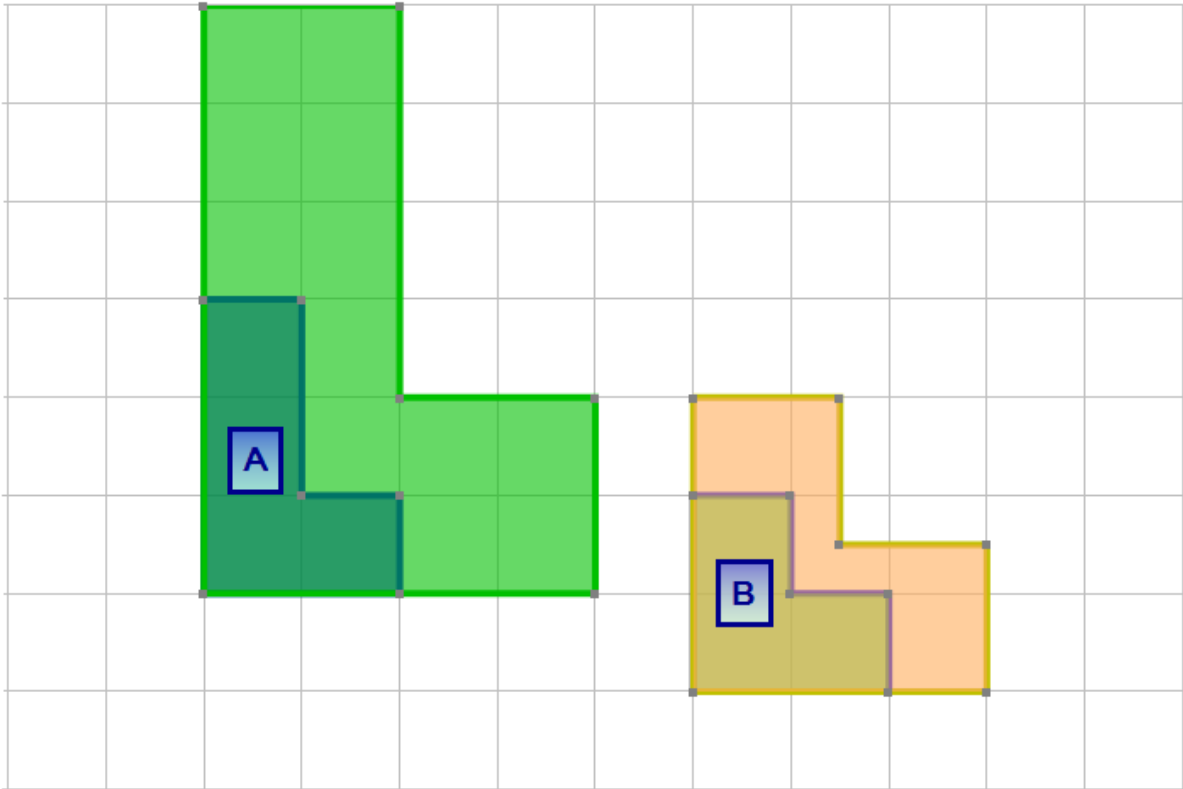


*6. Enlarge the shape below scale factor -1.5 , centre, the point A.



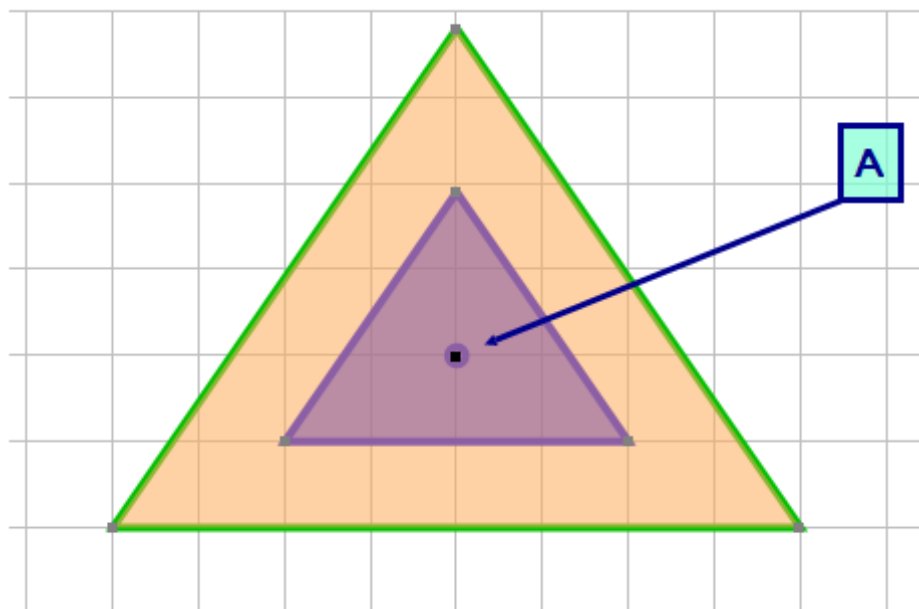
ANSWERS: (not in order)

1. Ratio of areas = 1:4

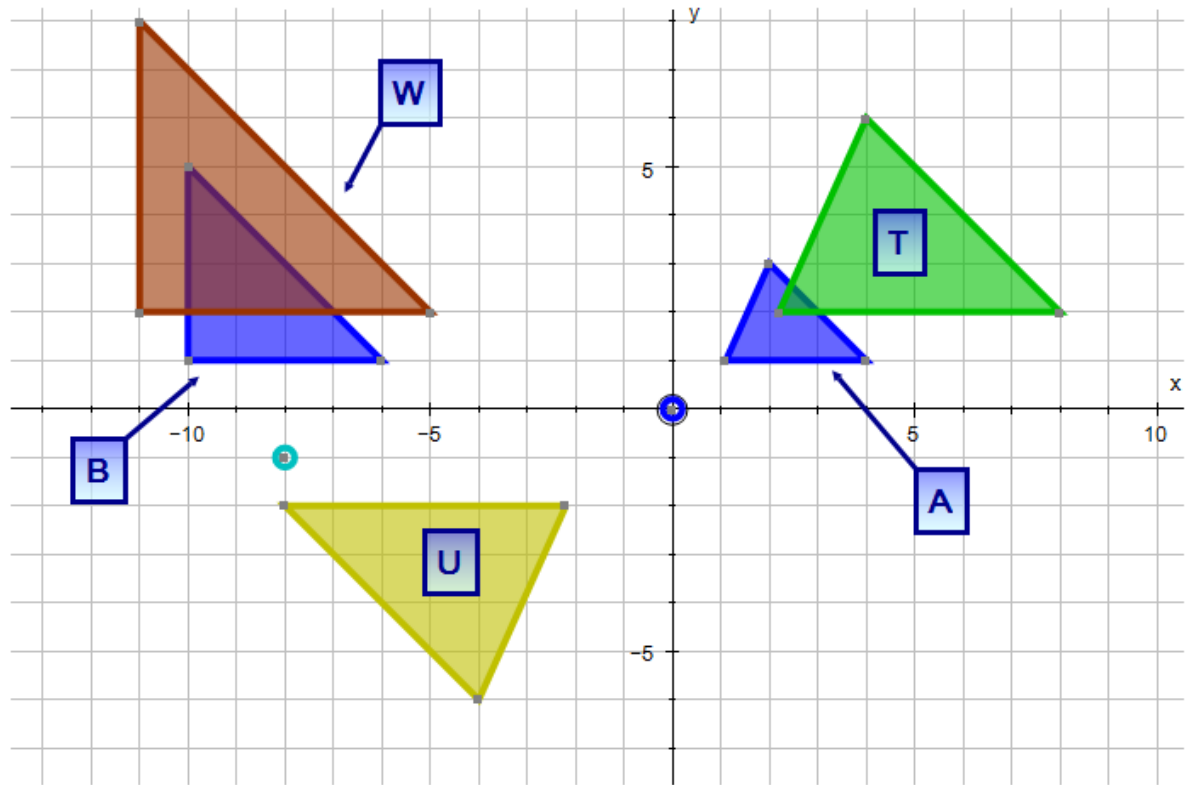


2. Discussion

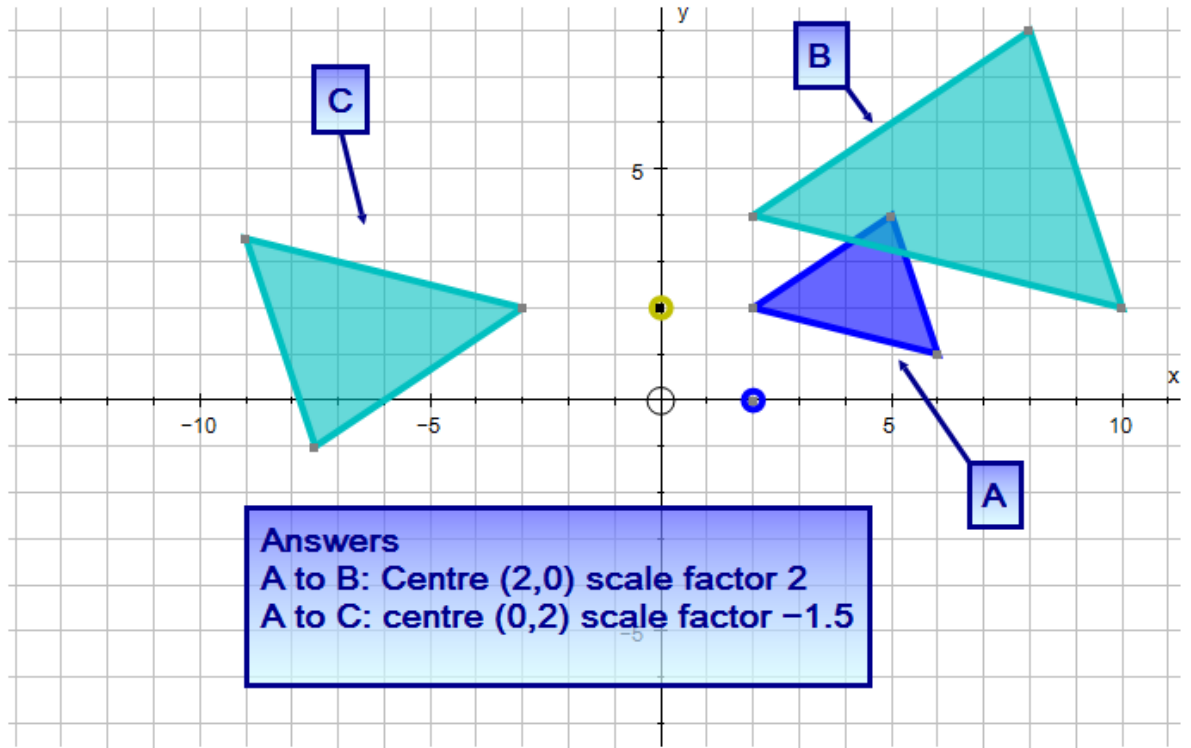
4.



3.

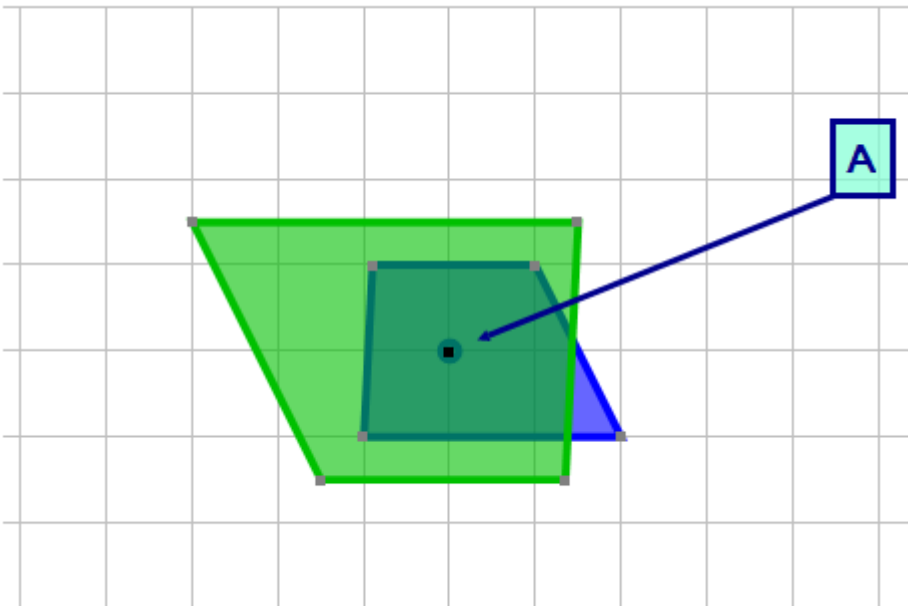


5.



(c) Ratio = 1:4 (d) ratio = 1: 2.25 (e) Angles remain the same.

*6.



I hope you find this useful. If you find any errors, please let me know.