

lots of SHAPE 6

Translate this shape using the column vector

$$\begin{pmatrix} 4 \\ 3 \end{pmatrix}$$

Translate this shape using the column vector

$$\begin{pmatrix} -3 \\ 1 \end{pmatrix}$$

Describe the translation using a column vector that takes the Green shape to the Yellow shape

$$\begin{pmatrix} \\ \end{pmatrix}$$

Describe the translation using a column vector that takes the Green shape to the Yellow shape

$$\begin{pmatrix} \\ \end{pmatrix}$$

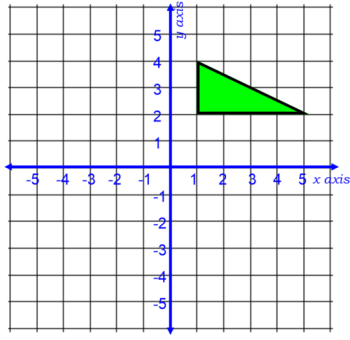
Reflect the shape in the line $y=2$

Describe the transformation that takes the Green to the Yellow

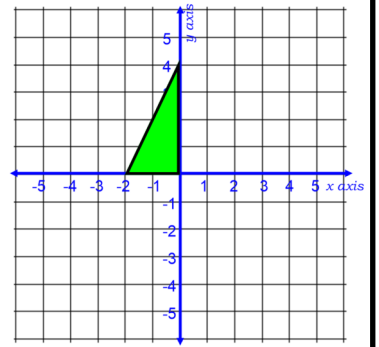
Describe the transformation that takes the Green to the Yellow

Reflect the shape in the line $x=-1$

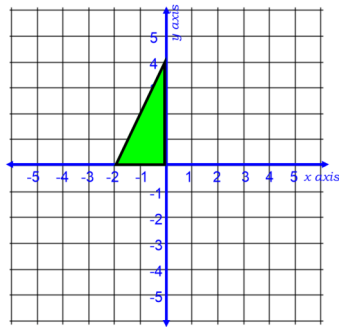
Rotate this shape 90° clockwise around the point (0,0)



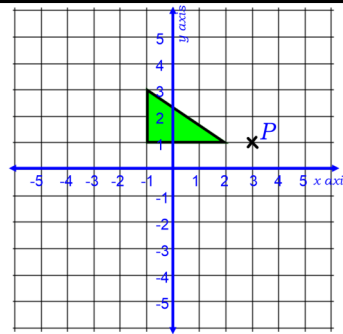
Rotate this shape 90° clockwise around the point (2,1)



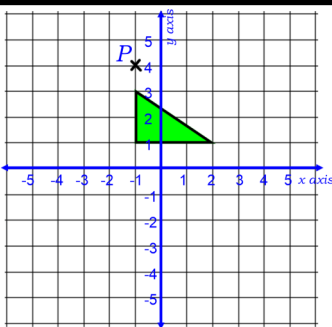
Rotate this shape 90° anti-clockwise around the point (2,1)



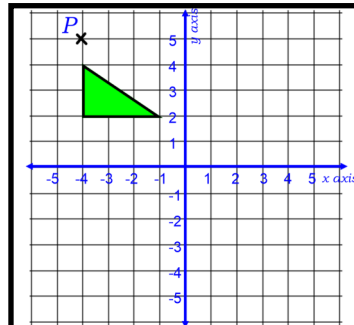
Enlarge this shape with Scale Factor 2 and centre of enlargement point P



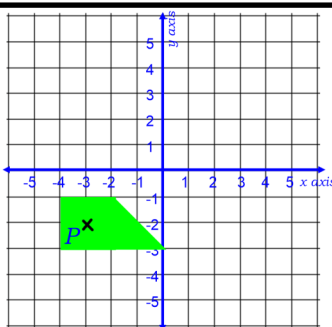
Enlarge this shape with Scale Factor 2 and centre of enlargement point P



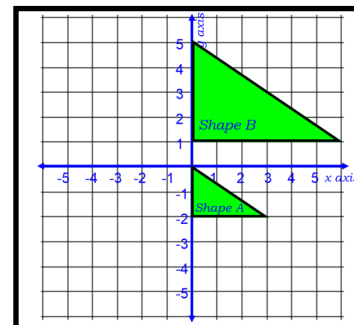
Enlarge this shape with Scale Factor 3 and centre of enlargement point P



Enlarge this shape with Scale Factor 2 and centre of enlargement point P



Describe this transformation from shape A to shape B



Which points are equidistant from both points A and B?

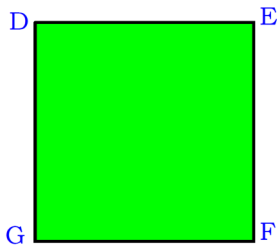


Draw the loci of all the points 3 units from point P

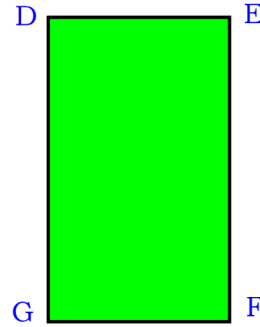


P

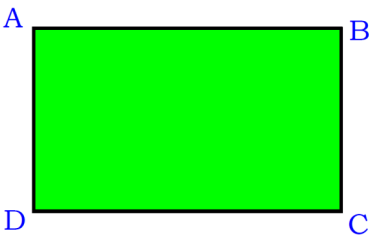
There is a sheep tied to post at the corner F of this field.
It has a chain of length 30m.
Draw the region that the sheep can graze



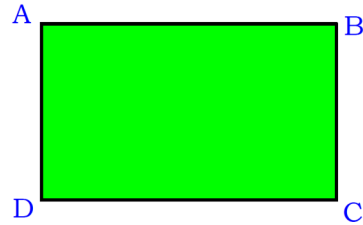
There is a sheep tied to post at the corner G of this field.
It has a chain of length 40m.
Draw the region that the sheep can graze



A museum has a priceless painting.
The room measures 50m by 30m.
It is protected by 2 motion sensors positioned at A and C
that can detect 20m in any direction from that point.
Describe how secure the room is



A museum has a priceless painting.
The room measures 50m by 30m.
It is protected by 2 motion sensors positioned at A and C
that can detect 30m in any direction from that point.
Describe how secure the room is



A museum has a priceless sculpture.
The room measures 50m by 30m.

The sculpture must be placed within 30m from point B
and closer to the wall AB than wall CD.

Draw the region which could be chosen for the sculpture.

