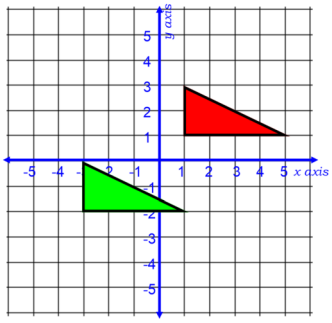
Lots of SHAPE 6 ANSWERS

Translate this shape
using the column vector

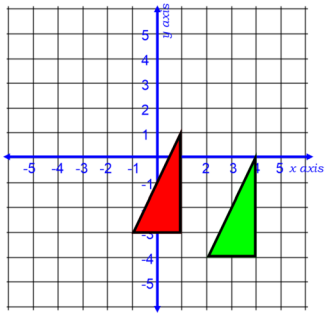
$\begin{pmatrix} 4 \\ 3 \end{pmatrix}$



Translations always go along horizontally, then vertically.

Translate this shape
using the column vector

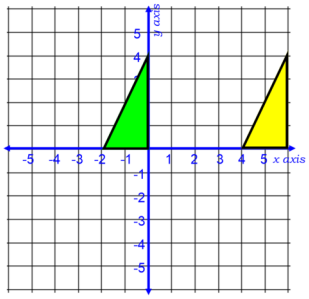
$\begin{pmatrix} -3 \\ 1 \end{pmatrix}$



Translations always go along horizontally, then vertically.

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

$\begin{pmatrix} 6 \\ 0 \end{pmatrix}$

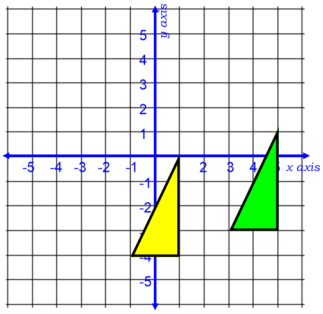


Translation is 6 right then 0 up

Translations always go along horizontally, then vertically.

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

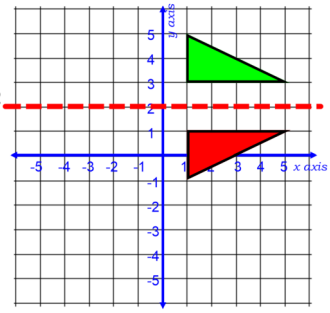
$\begin{pmatrix} -4 \\ -1 \end{pmatrix}$



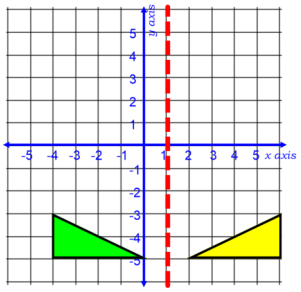
Translation is 4 less then 1 down

Translations always go along horizontally, then vertically.

Reflect the shape in the line y=2

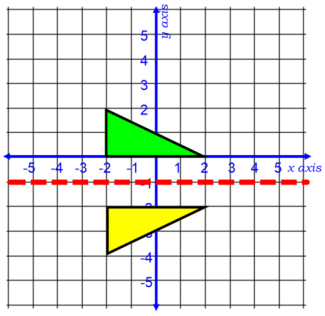


Describe the transformation that
takes the Green to the Yellow



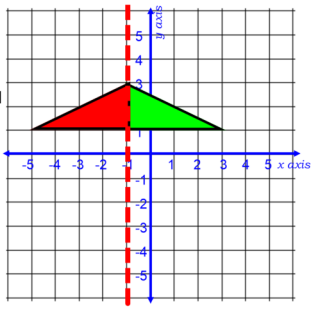
The Green triangle is reflected in the vertical line called x=1
to go to the Yellow triangle.

Describe the transformation that
takes the Green to the Yellow

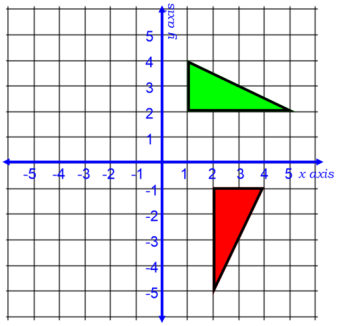


The Green triangle is reflected in the horizontal line called y= -1
to go to the Yellow triangle.

Reflect the shape in the line x= -1

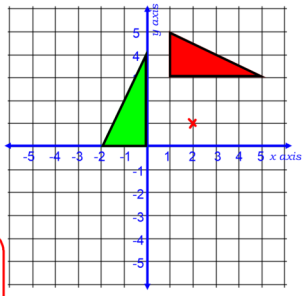


Rotate this shape 90°
clockwise
around the point (0,0)



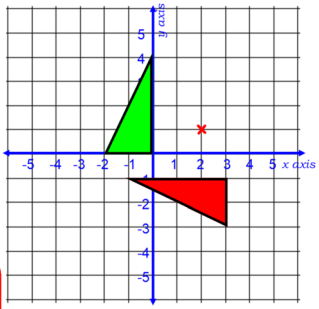
You need
Angle 90° 180° or 270°
Clockwise or Anti-clockwise
Point of rotation
Use Tracing Paper

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

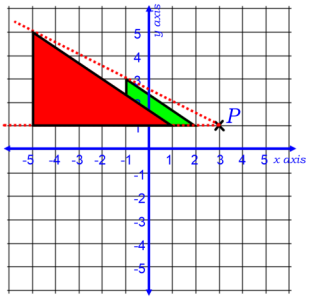


You need
Angle 90° 180° or 270°
Clockwise or Anti-clockwise
Point of rotation
Use Tracing Paper

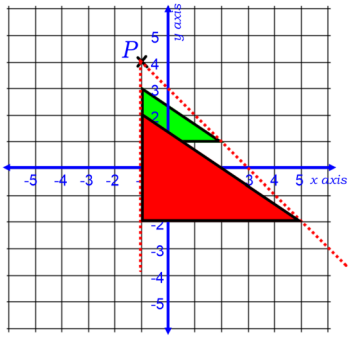
Rotate this shape 90°
anti-clockwise
around the point (2,1)



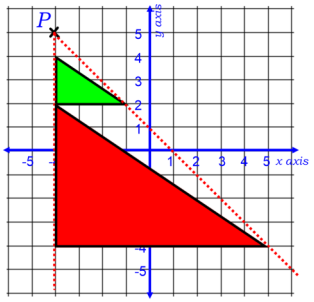
You need
Angle 90° 180° or 270°
Clockwise or Anti-clockwise
Point of rotation
Use Tracing Paper



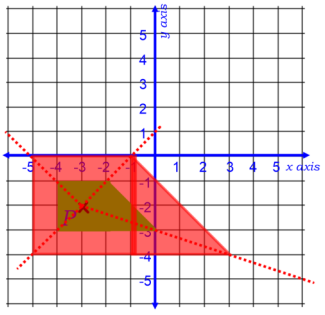
Enlarge this shape with
Scale Factor 2 and
centre of enlargement point P



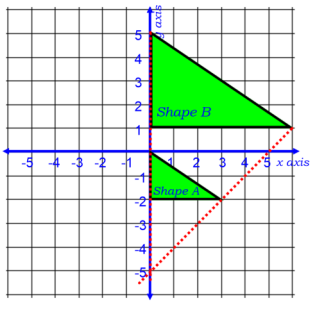
Enlarge this shape with
Scale Factor 2 and
centre of enlargement point P



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



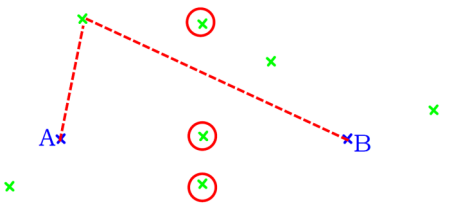
Enlarge this shape with
Scale Factor 2 and
centre of enlargement point P



Describe this transformation from shape A to shape B

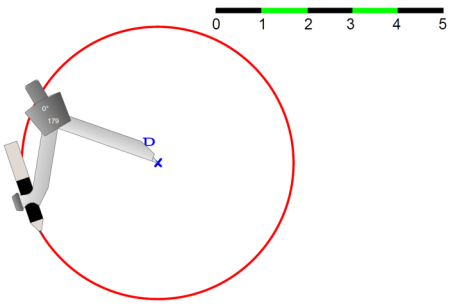
Enlargement scale factor 2 with centre of enlargement (0,-5)

Which points are equidistant from both points A and B?



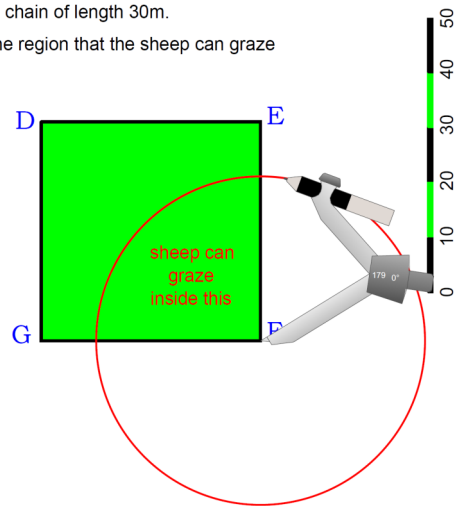
Equidistant means that they are the same distance away from A and B

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



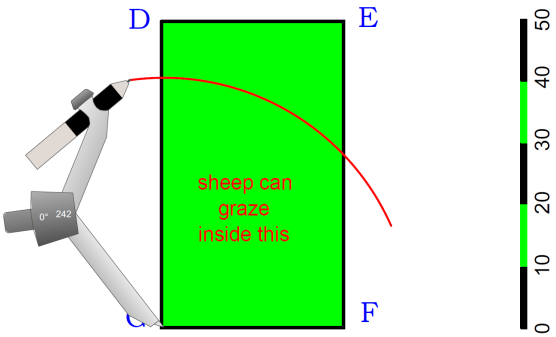
There is a sheep tied to post at the corner F of this field.
It has a chain of length 30m.

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.

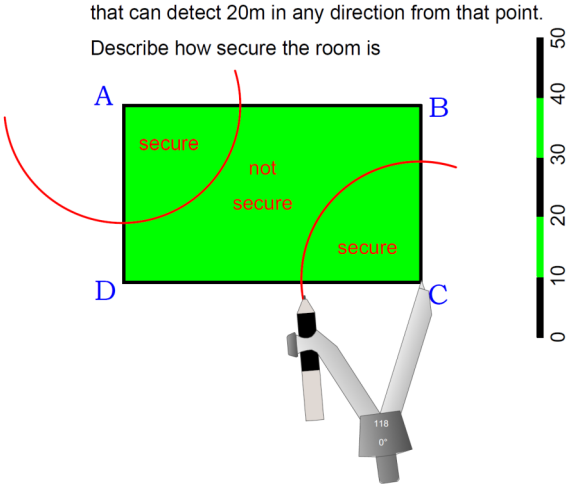
Draw the region that the sheep can graze



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.

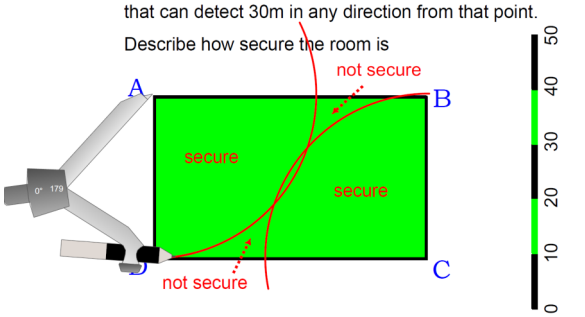
Describe how secure the room is



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.