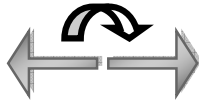


Hint List

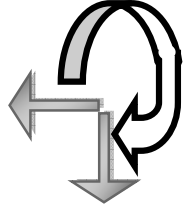
90° clockwise is 270° anticlockwise



180° clockwise is 180° anticlockwise



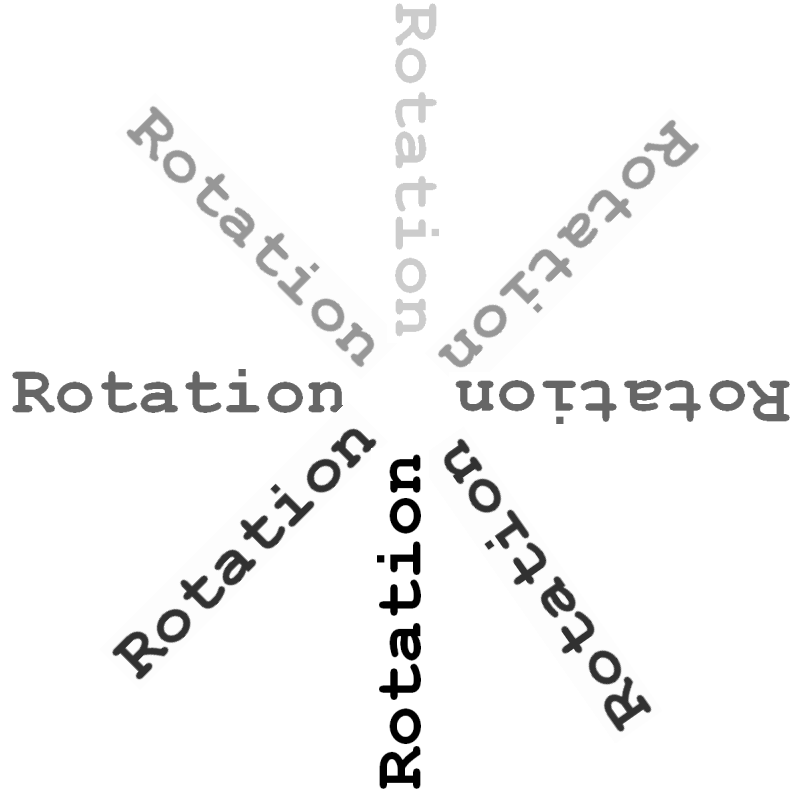
270° clockwise is 90° anticlockwise



45° clockwise is 315° anticlockwise

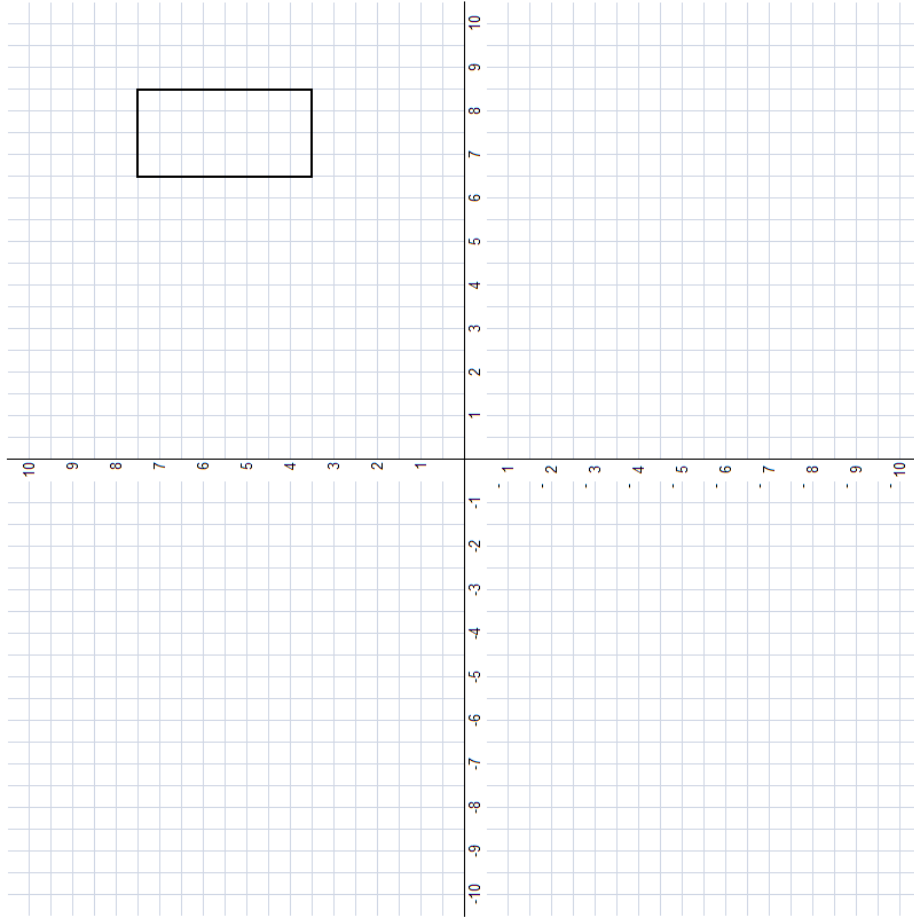


Rotation



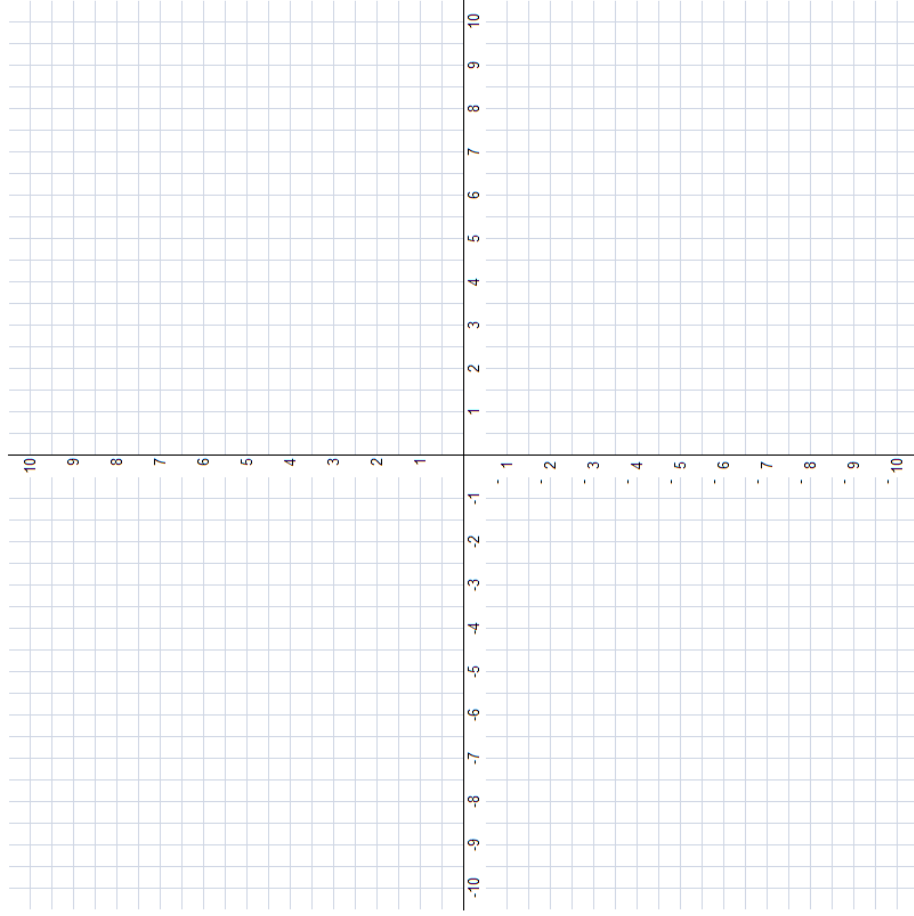
Name: _____

Task A



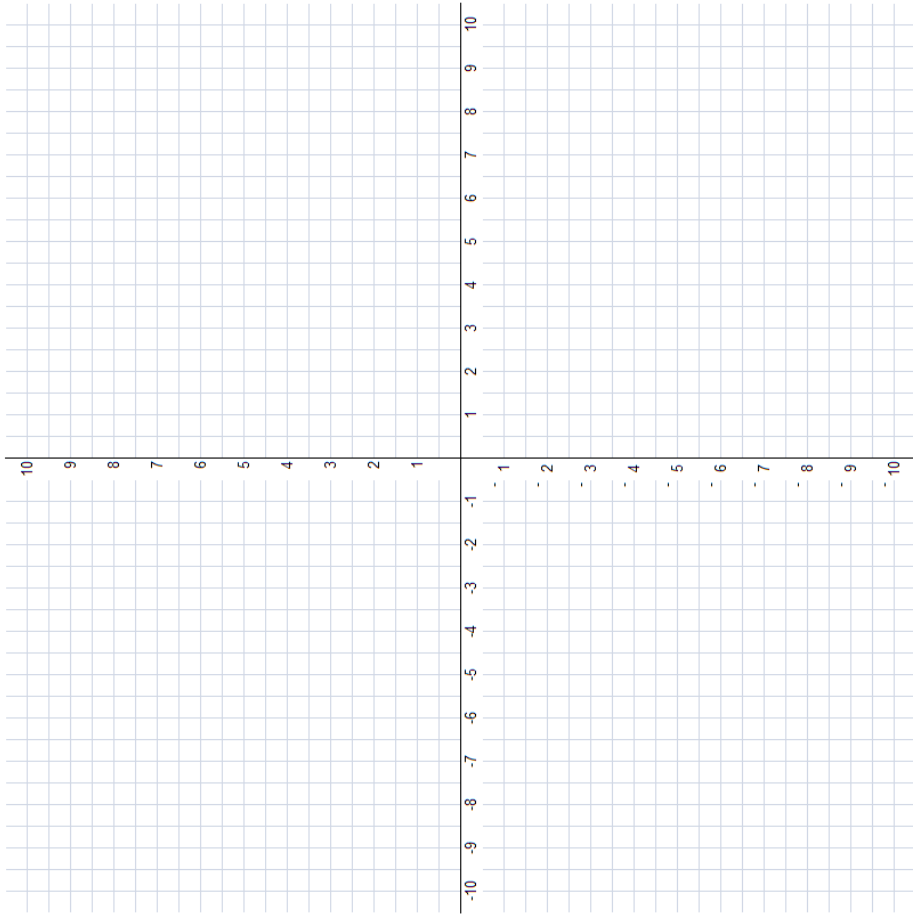
Rotate the shape **90° anticlockwise** about the point of rotation: **(0,0)**.

Task G - Part 3



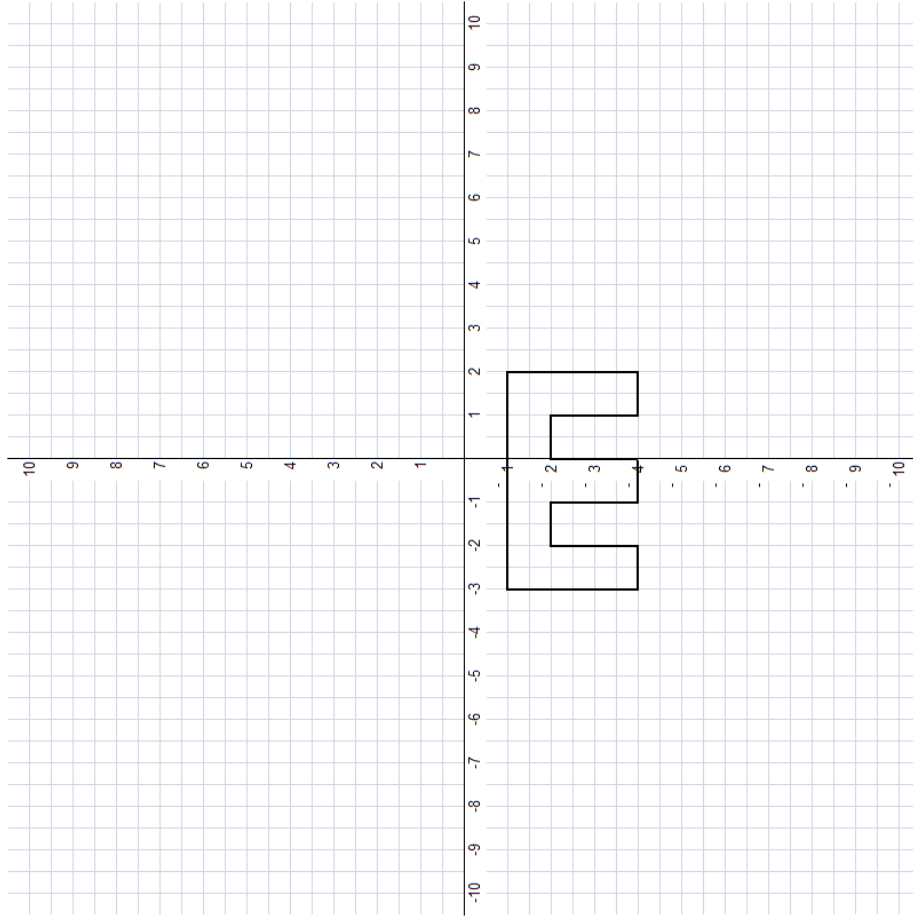
You may continue your investigation on this sheet.

Task G - Part 2



You may continue your investigation on this sheet.

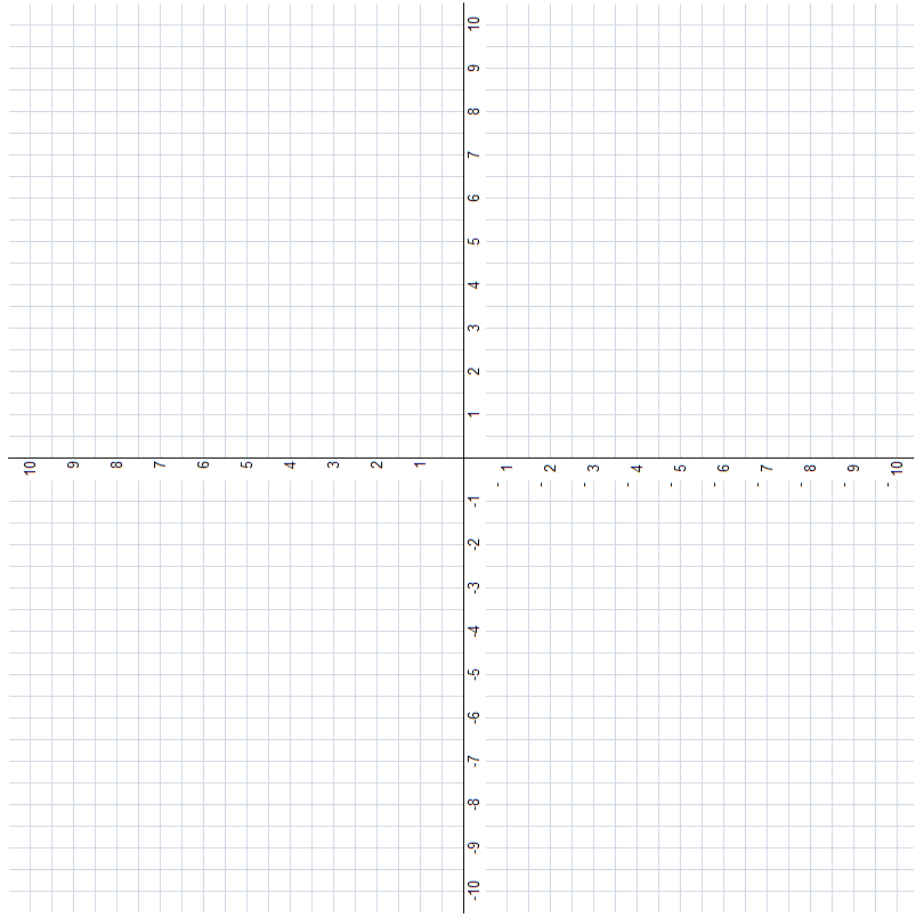
Task A - Part 2



Rotate the shape 180° about the point of rotation:

$(2, -1)$.

Task B - Part 1

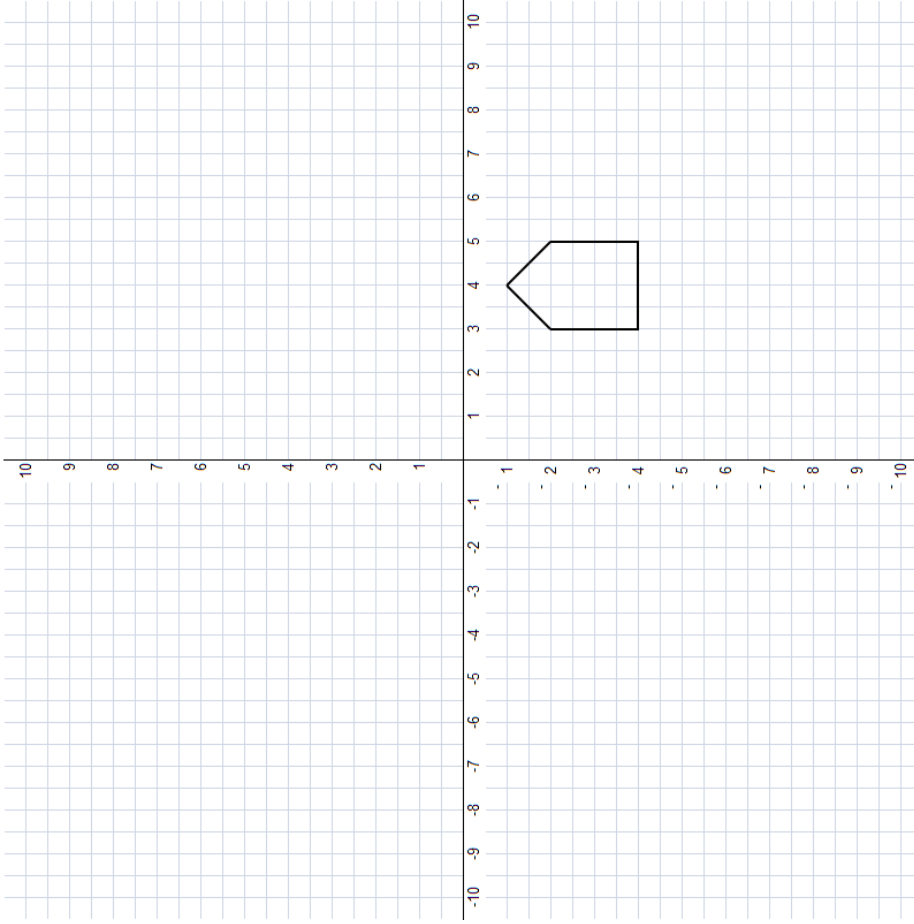


Join the following points to construct a shape:

$$(5, -3) - (7, -4) - (5, -5) - (5, -3)$$

Then rotate 270° clockwise about the point $(-3, 0)$.

Task G - Part 1



Rotate the shape 90° clockwise about the point $(4, -1)$.

Rotate this shape 90° anticlockwise about $(-4, -1)$.

Rotate this shape 180° about $(1, 1)$.

Rotate this shape 180° about $(5, -3)$.

What do you notice? Will this work if you do the rotations in a different order? Investigate.

Task F - Part 2

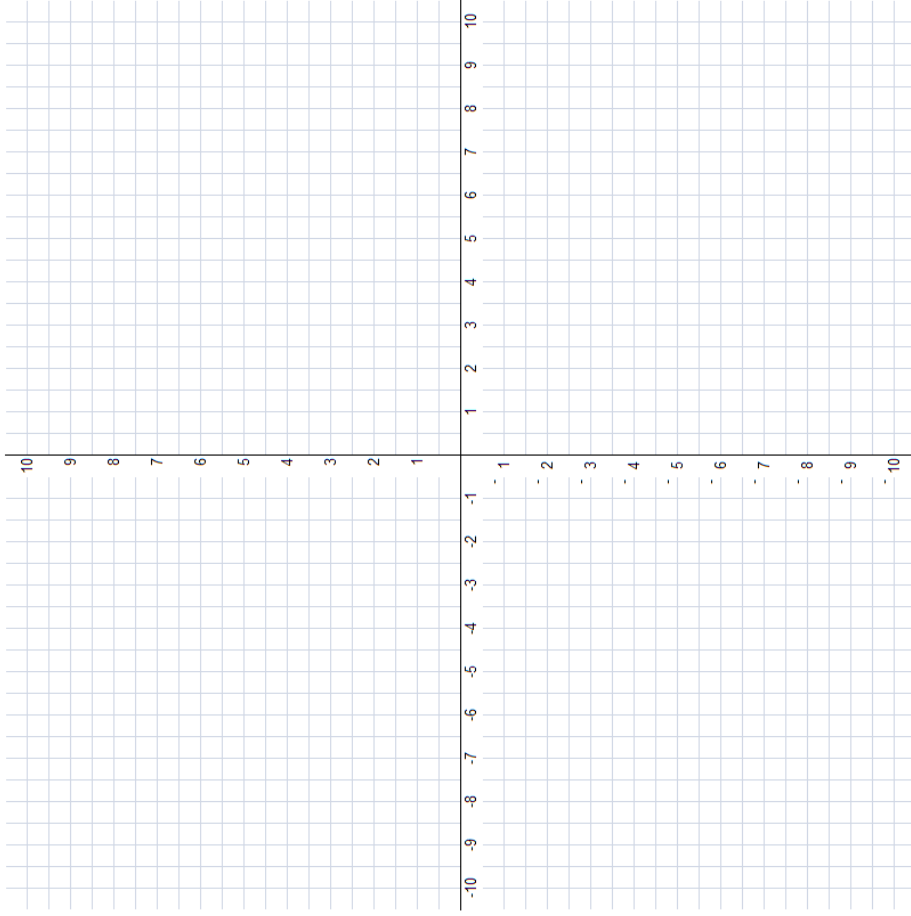


Draw a shape on the grid.

Choose a rotation and draw the resulting shape.

Angle: ° Direction: Point:

Task B - Part 2

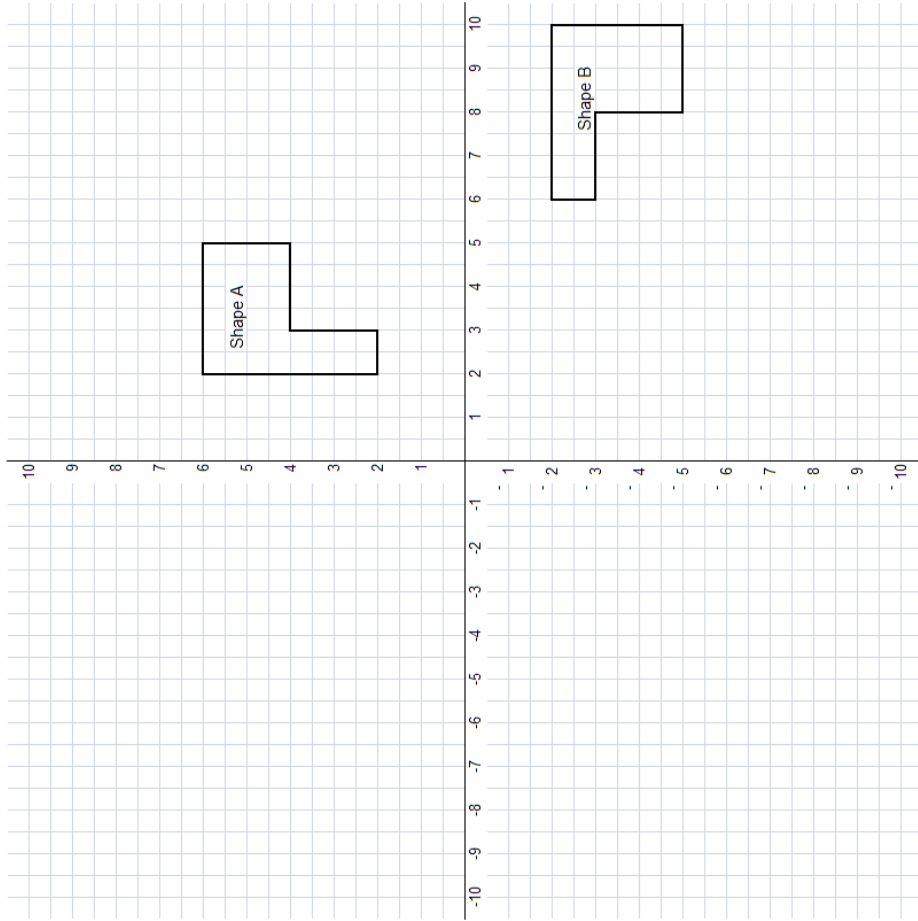


Join the following points to construct a shape:

$(3, 2) - (5, 2) - (5, -2) - (3, 0) - (3, 2)$

Then rotate **90°** anticlockwise about the point **$(-2, 1)$** .

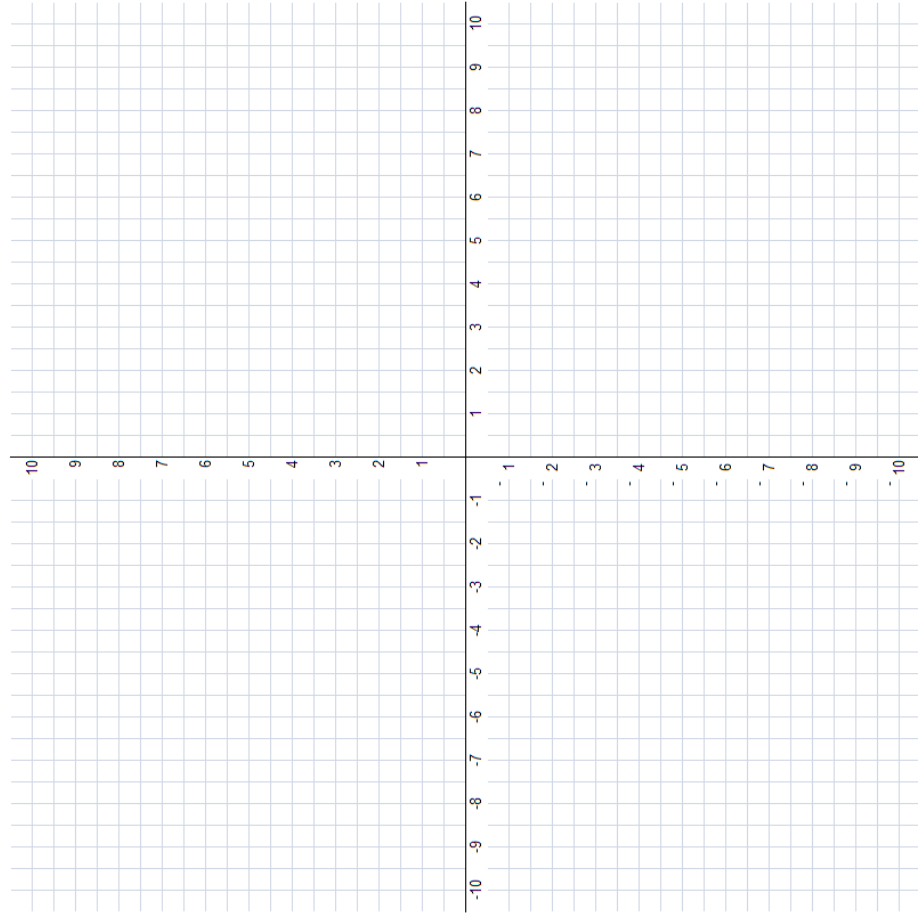
Task C - Part 1



Give the rotation needed to send shape A to shape B:

Angle: ° Direction: Point:

Task F - Part 1



Draw a shape on the grid.

Choose a rotation and draw the resulting shape.

Angle: ° Direction: Point:

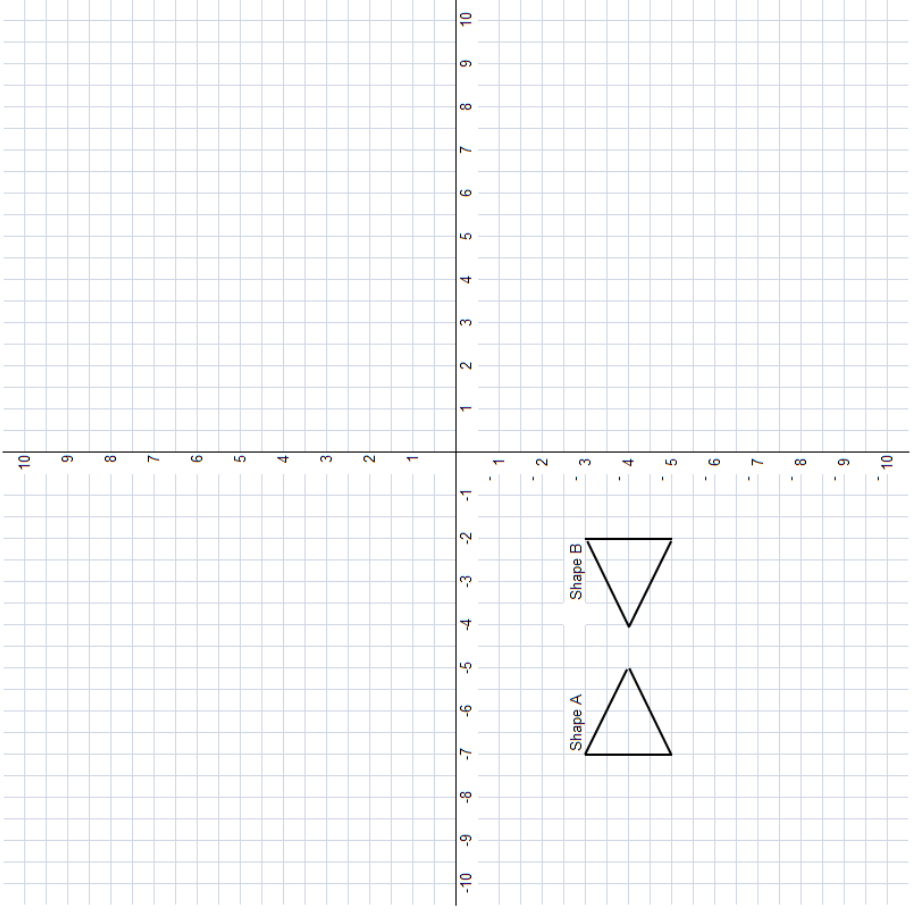
Task E - Part 2



Join the following points to construct a shape: $(0, 5) - (-2, 5) - (-2, 4) - (0, 4) - (0, 3) - (-3, 3) - (-3, 6) - (0, 6) - (0, 5)$

Rotate **90° anticlockwise** about the point $(-3, 3)$, then **180°** about the point $(1, -2)$.

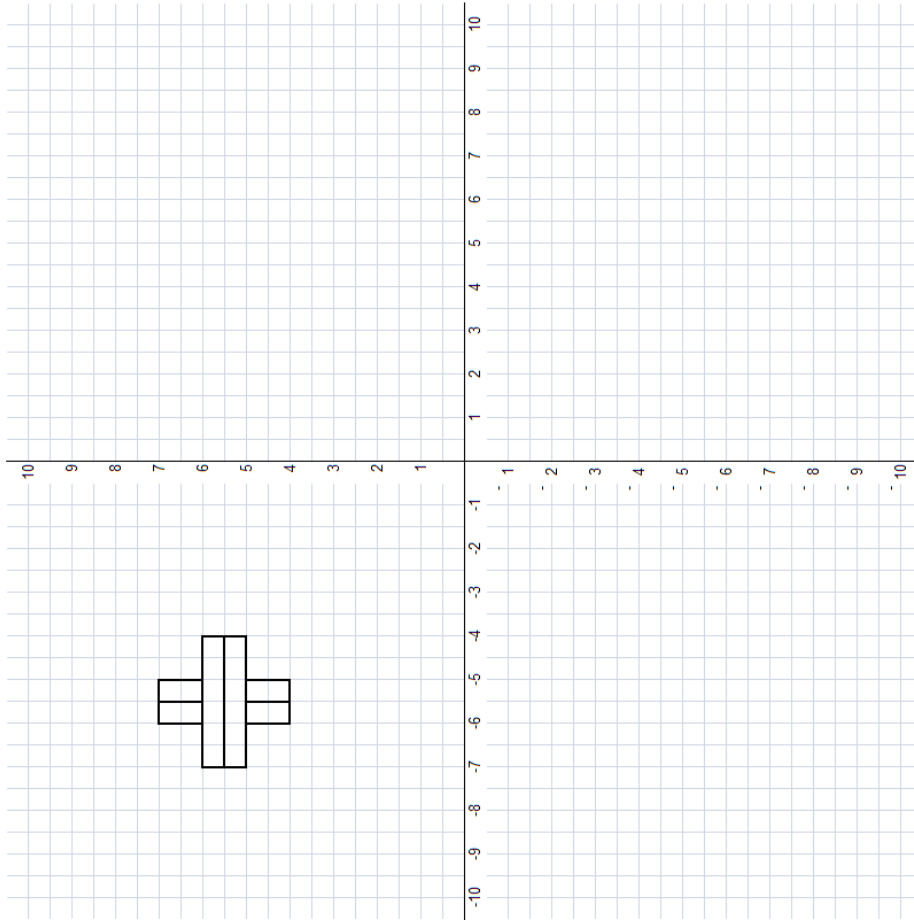
Task C - Part 2



Give the rotation needed to send shape A to shape B:

Angle: ___ ° Direction: _____ Point: _____

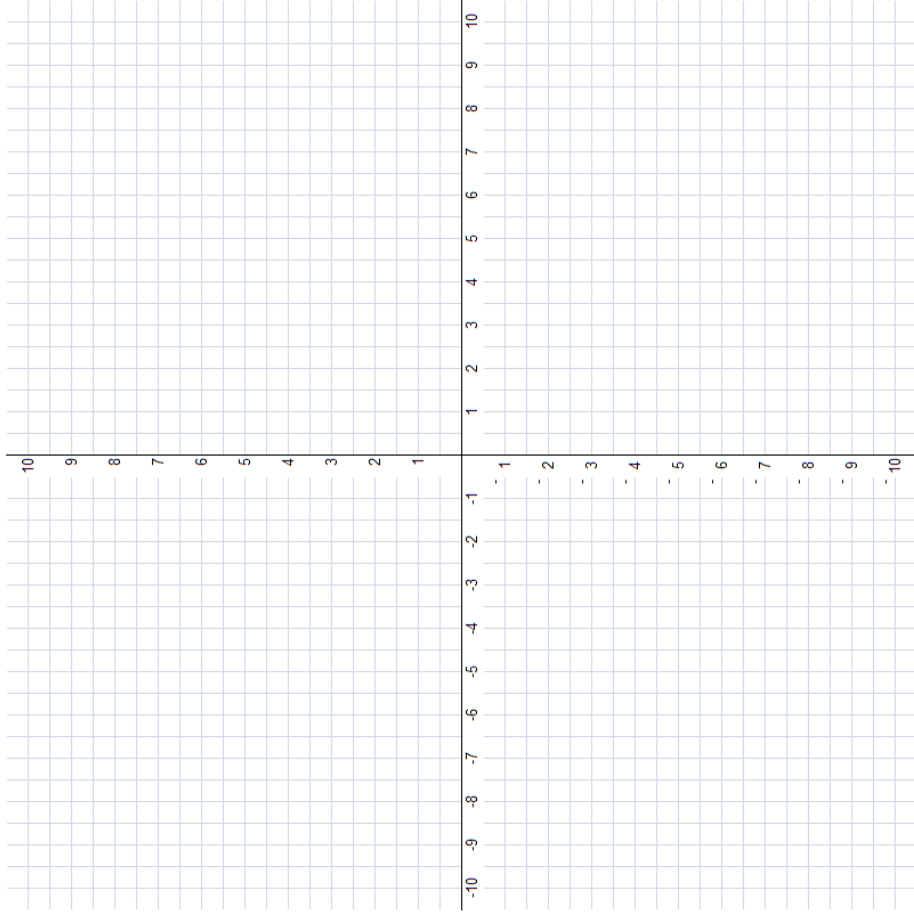
Task D



Rotate **270° clockwise** about the point **(-4, 5)**

Then rotate this shape **360°** about the point **(6, -8)**.

Task E - Part 1



Join the following points to construct a shape: **(4, 10) - (9, 10) - (9, 9) - (7, 9) - (7, 6) - (6, 6) - (6, 9) - (4, 9) - (4, 10)**

Rotate **180°** about the point **(6.5, 10)**, then **45° clockwise** about the point **(6, 14)**.