

TOPIC 10-3: ROTATIONS

ROTATIONS

Two types:



Determined by degrees:

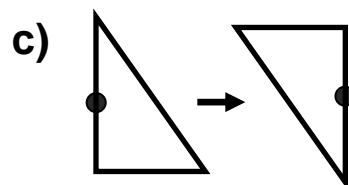
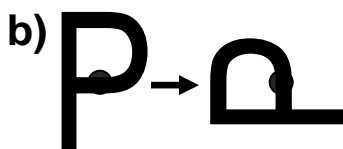
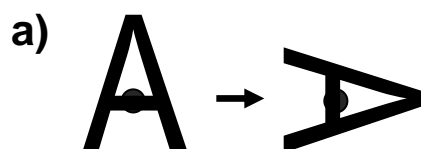
90°:

180°:

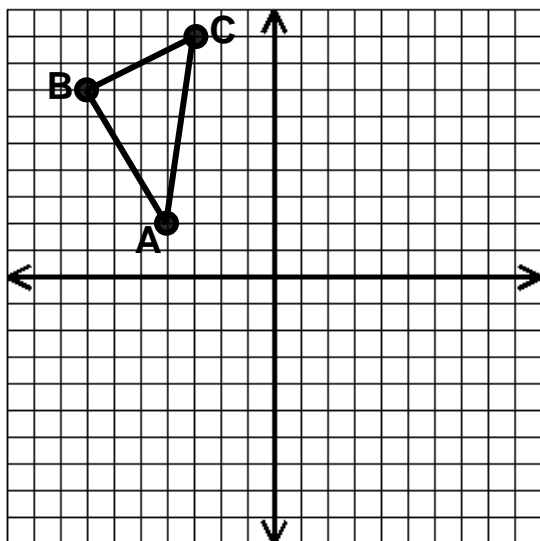
270°:

360°:

EXAMPLE 1: Describe each rotation.



EXAMPLE 2: Draw the resulting triangles when the triangle is rotated 90°, 180°, and 270° clockwise about the origin.



After 90° Rotation:

A' (_____, _____)

B' (_____, _____)

C' (_____, _____)

After 270° Rotation:

A' (_____, _____)

B' (_____, _____)

C' (_____, _____)

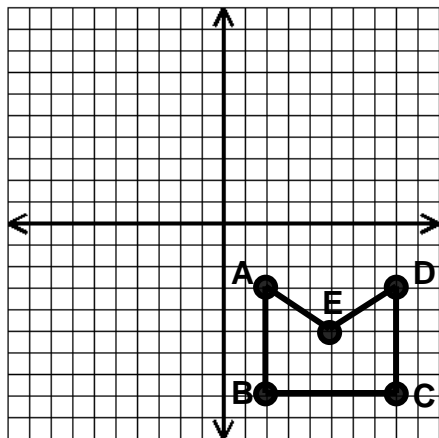
After 180° Rotation:

A' (_____, _____)

B' (_____, _____)

C' (_____, _____)

EXAMPLE 3: Rotate the figure below 90° clockwise about the origin and define its new coordinates.



A' (_____, _____)

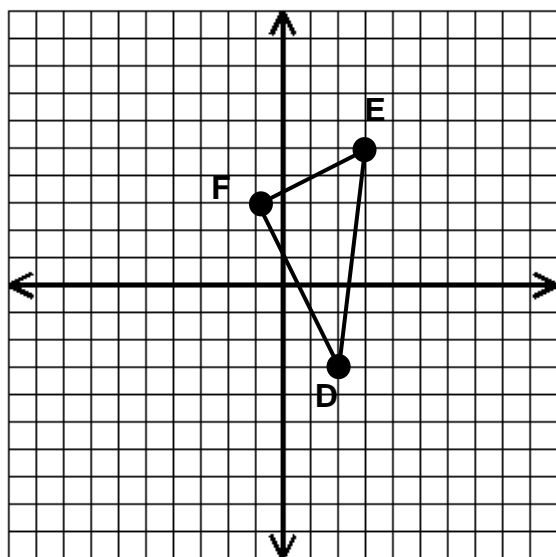
B' (_____, _____)

C' (_____, _____)

D' (_____, _____)

E' (_____, _____)

EXAMPLE 4: Rotate the figure below 180° about the origin and define its new coordinates.

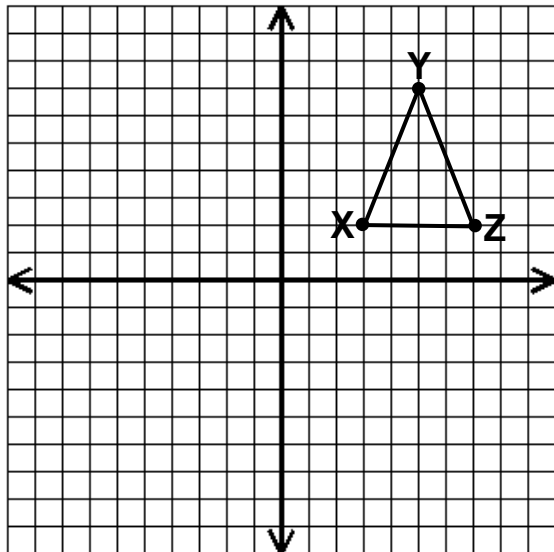


D' (_____, _____)

E' (_____, _____)

F' (_____, _____)

EXAMPLE 5: Rotate the figure below 90° counter-clockwise about the origin and define its new coordinates.



X' (_____ , _____)

Y' (_____ , _____)

Z' (_____ , _____)