



90° rotate one quadrant

180° rotate two quadrants

270° rotate three quadrants

**EXAMPLE:** Rotate  $\triangle ABC$  180° clockwise.

Rotate each point 180° or two quadrants clockwise (the coordinates swap twice).

SO, BACK TO THE ORIGINAL POSITION

$A$  is  $(3, 1)$ , so  $A'$  is  $(-3, -1)$ .

Both coordinates are negative because  $A'$  will be in QIII.

$B$  is  $(3, 4)$ , so  $B'$  is  $(-3, -4)$  because  $B'$  will be in QIII.

$C$  is  $(1, 1)$ , so  $C'$  is  $(-1, -1)$  because  $C'$  will be in QIII.

