

Get the Picture?

COORDINATE GRAPH PAGE 1

- I. Graph each ordered pair of integers. Connect the points in the order listed to form a picture. After completing the picture, **reflect** across the **x-axis**.
(4,6) (3,7) (2,6) (1,7) (0,6) (1,8) (4,9) (7,8) (8,6) (7,7) (6,6) (5,7) (4,6) (4,0) (5,0) (5,1)
- II. Graph each ordered pair of integers. Connect the points in the order listed to form a picture. After completing the picture, **reflect** across the **y-axis**.
(1,1) (4,1) (5, -2) (4, -2) (4, -5) (3, -5) (3, -4) (2, -4) (2, -5) (1, -5) (1, -2) (0, -2) (1,1)
- III. Graph each ordered pair of integers. Connect the points in the order listed to form a picture. After completing the picture, **translate** each point to the right five units, and up three units. Give the coordinates of the new points which are: A', B' and C'.
A (-4,2) A' (,)
B (-2, -3) B' (,)
C (-5, -4) C' (,)
(-4,2)
- IV. Graph each ordered pair of integers. Connect the points in the order listed to form a picture. After completing the picture, **rotate** the picture clockwise 180° , using the point (0,1) as the point of rotation.
(0,1) (-3, 3) (0,5) (-1, 3) (0,1)

COORDINATE GRAPH PAGE 2

- V. Now it's your turn. On the first grid, design a simple picture in **quadrant I**. Make a list of the ordered pairs of integers below, so that the picture could be duplicated, then reflect it over the **x-axis**.
- VI. On the second grid, design a simple picture in **quadrant II**. Make a list of the ordered pairs of integers below, then **reflect** it over the **y-axis**.
- VII. On the third grid, design a simple picture in **quadrant III**. Make a list of the ordered pairs of integers below, so that the picture could be duplicated. Then **translate** your picture 5 units to the right and 4 units up.

VIII. On the fourth grid, design a simple picture in **quadrant IV**. Make a list of the ordered pairs of integers below, so that the picture could be duplicated. Then **rotate** your picture 90° clockwise, using the origin as the point of rotation.

When completed, you should have your original picture with a reflection, translation and rotation of that figure.