

6.G Polygons in the Coordinate Plane

The vertices of eight polygons are given below. For each polygon:

- Plot the points in the coordinate plane connect the points in the order that they are listed.
- Color the shape the indicated color and identify the type of polygon it is.
- Find the area.

a. The first polygon is GREY and has these vertices:

$$(-7, 4) (-8, 5) (-8, 6) (-7, 7) (-5, 7) (-5, 5) (-7, 4)$$

b. The second polygon is ORANGE and has these vertices:

$$(-2, -7) (-1, -4) (3, -1) (6, -7) (-2, -7)$$

c. The third polygon is GREEN and has these vertices:

$$(4, 3) (3, 3) (2, 2) (2, 1) (3, 0) (4, 0) (5, 1) (5, 2) (4, 3)$$

d. The fourth polygon is BROWN and has these vertices:

$$(0, -10) (0, -8) (7, -10) (0, -10)$$

e. The fifth polygon is PURPLE and has these vertices:

$$(-8, -5) (-8, -8) (-5, -8) (-5, -5) (-8, -5)$$

f. The sixth polygon is PINK and has these vertices:

$$(9, -1) (6, 1) (6, -3) (9, -1)$$

g. The seventh polygon is BLUE and has these vertices:

$$(-6, -4) (-6, 1) (-9, 1) (-9, -4) (-6, -4)$$

h. The eighth polygon is YELLOW and has these vertices:

$$(-5, 1) (-3, -3) (-1, -2) (0, 3) (-3, 3) (-5, 1)$$