## 6.G Polygons in the Coordinate Plane

## Task

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

- Plot the points in the coordinate plane and 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:

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

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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:

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

