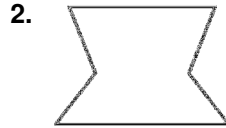


# 1.4

## Assignment

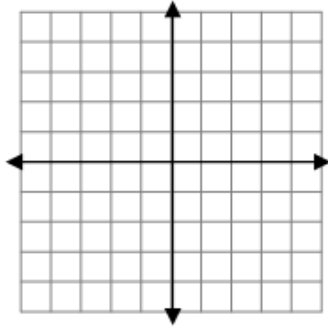
### Part A

In Exercises 1 and 2, classify the polygon by the number of sides. Tell whether it is *concave* or *convex*.

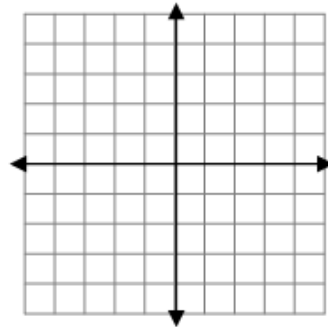


In Exercises 4 and 5, find the area of the polygon with the given vertices.

4.  $T(0, -2), U(3, 5), V(-3, 5)$



5.  $A(-3, 3), B(-3, -1), C(4, -1), D(4, 3)$

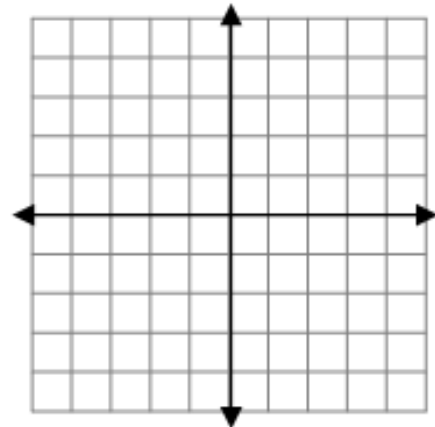


11. A rectangle has vertices  $(1, 4), (3, 4),$  and  $(3, -3)$ .

Find the remaining vertex of the rectangle.

What is the area of the rectangle?

Find the length of each diagonal in the rectangle to the nearest tenth.



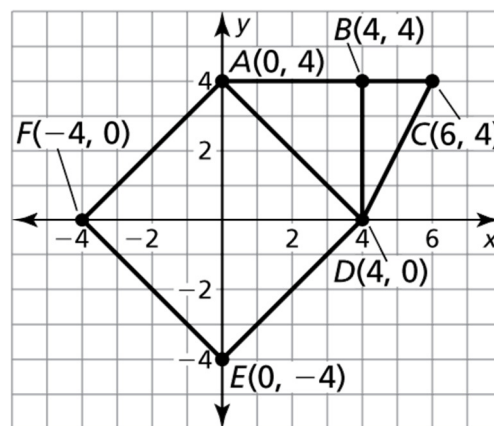
In Exercises 6–10, use the diagram to the right.  
Begin by finding the length of all the line segments.

6. Find the perimeter of square  $ADEF$ .

7. Find the perimeter of  $\triangle BCD$ .

8. Find the area of square  $ADEF$ .

9. Find the area of  $\triangle ACD$ .



## Answers

### 1.4 Practice A

1. quadrilateral; convex
2. hexagon; concave
3. about 16.5 units
4. 21 square units
5. 28 square units
6. about 22.6 units
7. about 10.5 units
8. 32 square units
9. 12 square units
10. 44 square units
11.  $(1, -3)$ ; 14 square units
12. a. 360 ft   b. 240 ft   c. \$1000