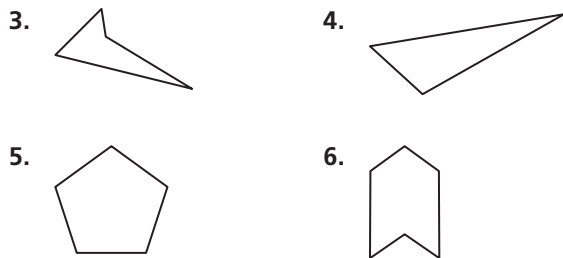


Vocabulary and Core Concept Check

- COMPLETE THE SENTENCE** The perimeter of a square with side length s is $P = \underline{\hspace{2cm}}$.
- WRITING** What formulas can you use to find the area of a triangle in a coordinate plane?

Monitoring Progress and Modeling with Mathematics

In Exercises 3–6, classify the polygon by the number of sides. Tell whether it is *convex* or *concave*. (See Example 1.)

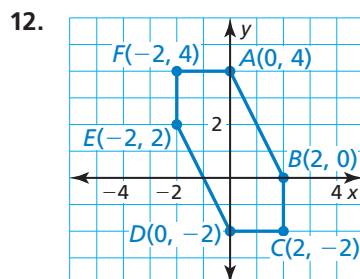
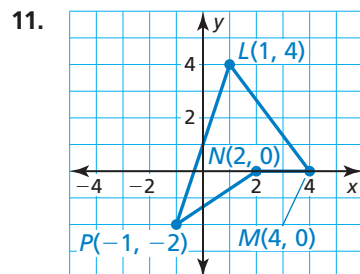


In Exercises 13–16, find the area of the polygon with the given vertices. (See Example 3.)

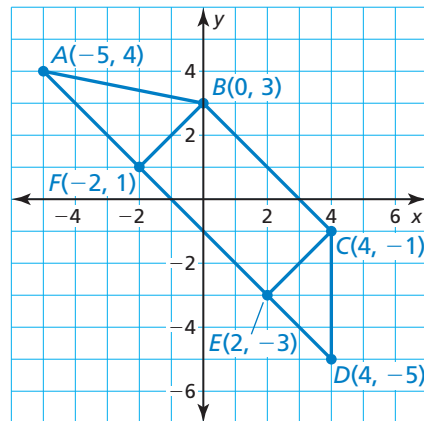
- $E(3, 1), F(3, -2), G(-2, -2)$
- $J(-3, 4), K(4, 4), L(3, -3)$
- $W(0, 0), X(0, 3), Y(-3, 3), Z(-3, 0)$
- $N(-2, 1), P(3, 1), Q(3, -1), R(-2, -1)$

In Exercises 7–12, find the perimeter of the polygon with the given vertices. (See Example 2.)

- $G(2, 4), H(2, -3), J(-2, -3), K(-2, 4)$
- $Q(-3, 2), R(1, 2), S(1, -2), T(-3, -2)$
- $U(-2, 4), V(3, 4), W(3, -4)$
- $X(-1, 3), Y(3, 0), Z(-1, -2)$



In Exercises 17–24, use the diagram.



- Find the perimeter of $\triangle CDE$.
- Find the perimeter of rectangle $BCEF$.
- Find the perimeter of $\triangle ABF$.
- Find the perimeter of quadrilateral $ABCD$.
- Find the area of $\triangle CDE$.
- Find the area of rectangle $BCEF$.
- Find the area of $\triangle ABF$.
- Find the area of quadrilateral $ABCD$.