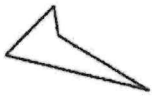
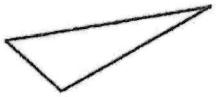
Math 1 Sec 8.4 Perimeter and Area in the Coordinate Plane

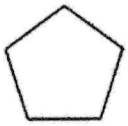
A. Use the distance formula to find the length of segment AB A(-5, 4) B(2, 6)

B. Use graph paper for # 9 - 18 to plot the figure, then find the requested information

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

3. 

4. 

5. 

6. 

In Exercises 9–14, find the perimeter of the polygon with the given vertices. *(See Example 2.)*

9. $G(2, 4), H(2, -3), J(-2, -3), K(-2, 4)$

10. $Q(-3, 2), R(1, 2), S(1, -2), T(-3, -2)$

11. $U(-2, 4), V(3, 4), W(3, -4)$

12. $X(-1, 3), Y(3, 0), Z(-1, -2)$

In Exercises 15–18, find the area of the polygon with the given vertices. *(See Example 3.)*

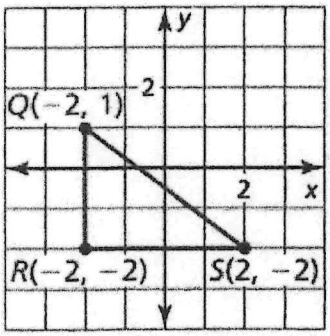
15. $E(3, 1), F(3, -2), G(-2, -2)$

16. $J(-3, 4), K(4, 4), L(3, -3)$

17. $W(0, 0), X(0, 3), Y(-3, 3), Z(-3, 0)$

18. $N(-2, 1), P(3, 1), Q(3, -1), R(-2, -1)$

Find the perimeter and area of triangle QRS



Indicate the number of sides of the polygon.

1. nonagon
2. hexagon
3. decagon
4. quadrilateral