

Name:

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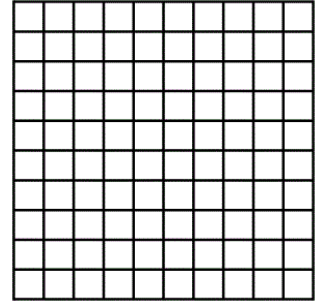
Sec1H

**Homework 6-3**  
**Applications of Distance Formula**

Unit 6

Calculate the perimeter of each of the polygons below.

1. Triangle ABC has vertices A  $(-2, 1)$ , B  $(-3, 5)$ , C  $(3, 6)$ .



2. Quadrilateral ABCD has vertices A  $(-4, 0)$ , B  $(-2, 3)$ , C  $(2, 3)$ , and D  $(2, 0)$ .

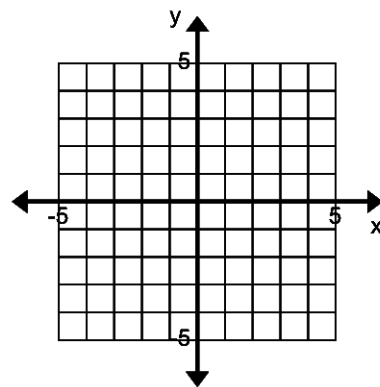
3. Parallelogram ABCD has vertices A  $(-5, 4)$ , B  $(-1, 6)$ , C  $(5, 2)$ , and D  $(1, 0)$ .

In #4-7, calculate the area of each polygon.

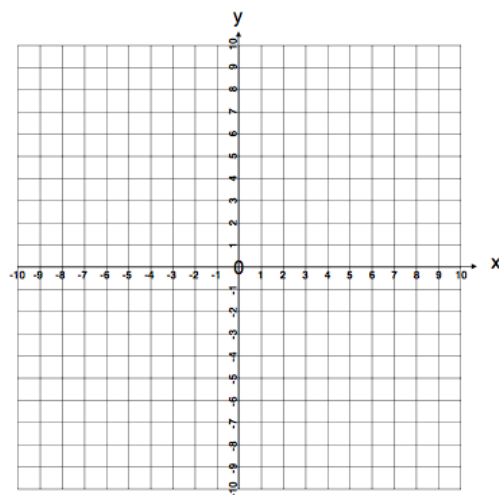
4. Rectangle ABCD has vertices A  $(-5, 2)$ , B  $(-5, 4)$ , C  $(4, 4)$ , and D  $(4, 2)$ .

5. Rectangle ABCD has vertices A(-4, -4), B(0, 2), C(9, -4), and D(5, -10).

6. Triangle ABC has vertices A(-2, 5), B(3, 1), and C(3, 5). (You can use the graph on the right if you want- you do not have to.)



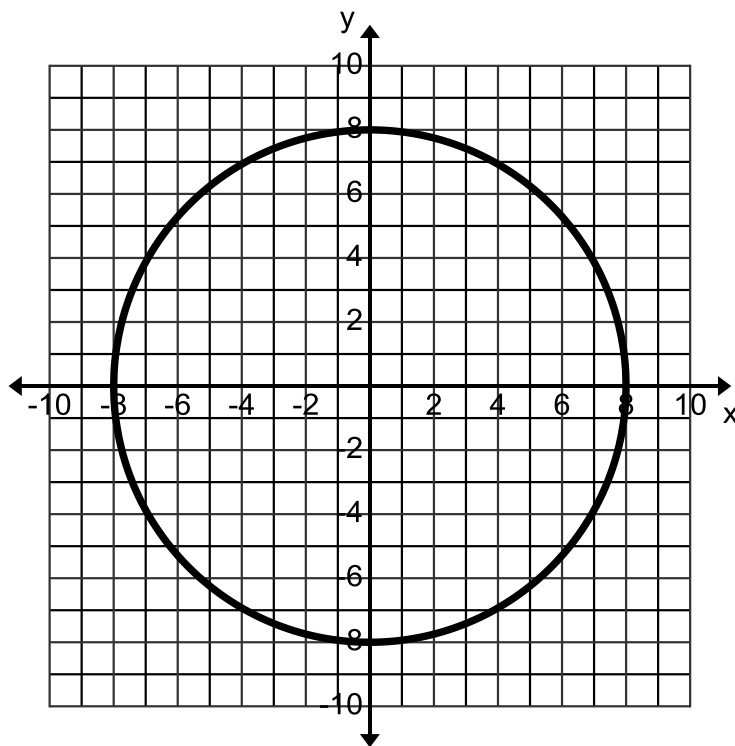
7. Triangle ABC has vertices A(3, 5), B(7, 8), and C(5, -3). (You can use the graph on the right if you want- you do not have to.)



8. Given this circle with an origin of the center, determine if the points are on the circle.

a.  $(7, 4)$

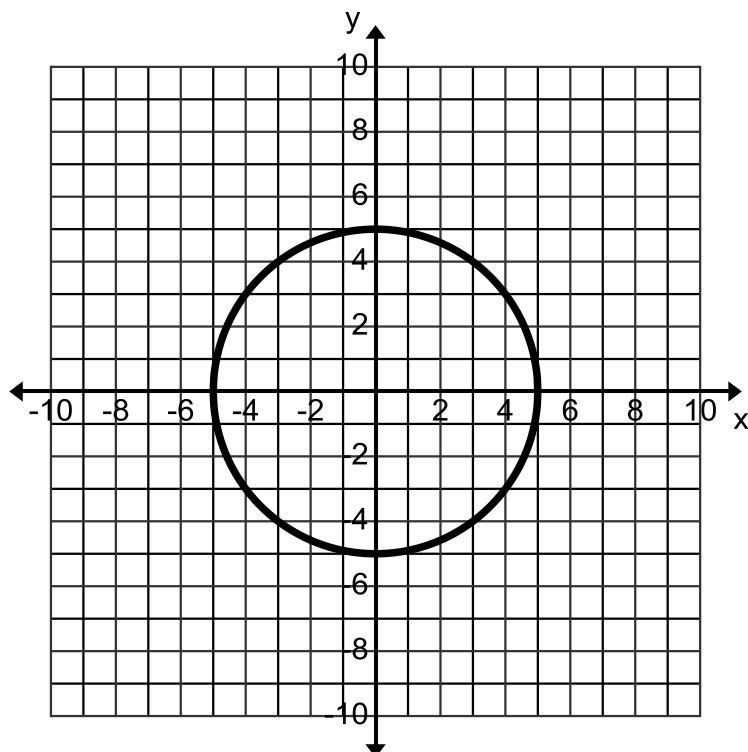
b.  $(-6, -5)$



9. Given this circle with an origin of the center, determine if the points are on the circle.

a.  $(-3, 4)$

b.  $(\sqrt{3}, \sqrt{22})$



**10. Given a circle with radius 3 and centered at (2, 4): determine if the following points are on the circle.**

a. (1, 1)

b. (5, 4)

