Name _____ Due Date _____ Period _____

13.8 Area using the Distance Formula

1. What is the equation for area of a rectangle/parallelogram?

   a. How do you find the height of a parallelogram?

2. What is the equation for area of a Triangle?
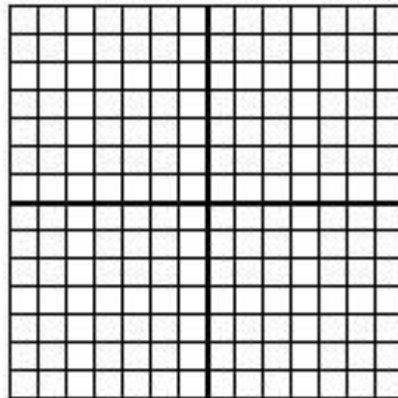
   a. How do you find the height of a triangle?

3. A triangle is defined by the points A (13,13), B (18,9) and C (8,9). What is the area of the triangle?
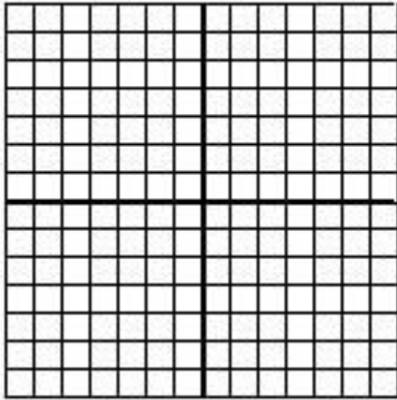

Find the area for each of the following:

4. Square PQRS has vertices P(-3, 0), Q(0, 4), R(4, 1), and S(1, -3). Determine the area of the square.
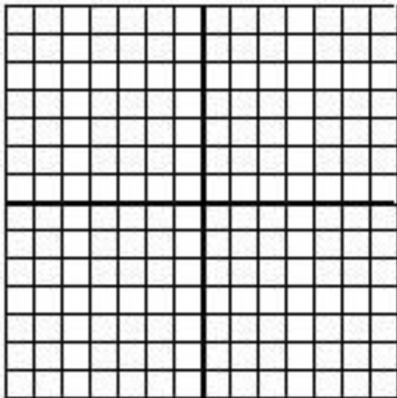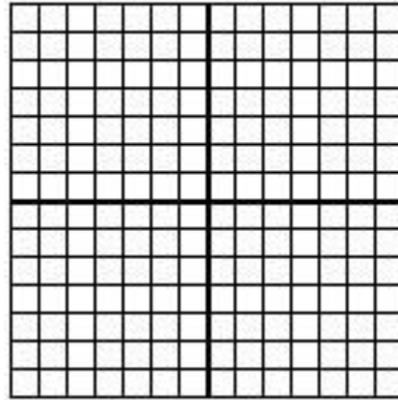
5. Rectangle ABCD has vertices A (-3, -4), B (-1, 2), C (2, 1), and D (0, -5). Determine the area of the rectangle.

6. Triangle ABC has vertices A (1, -1), B (4, 3), and C (5, -3). Calculate the area of triangle ABC.

7. Find the area of the parallelogram whose vertices are
(0, -1), (0, -4), (5, -1), and (5, -4)

8. Find the area of the square whose vertices are
(4, 7), (1, 7), (1, 3), and (4, 3)

9. Find the area of the triangle whose vertices are
(6, 4), (3, 4), and (6, 1)

10. Find the area of the triangle whose vertices are
(-2, 4), (1, 8), and (-2, 8)

11. Find the area of the triangle whose vertices are
(-9, 8), (-9, 16), and (-17, 8)