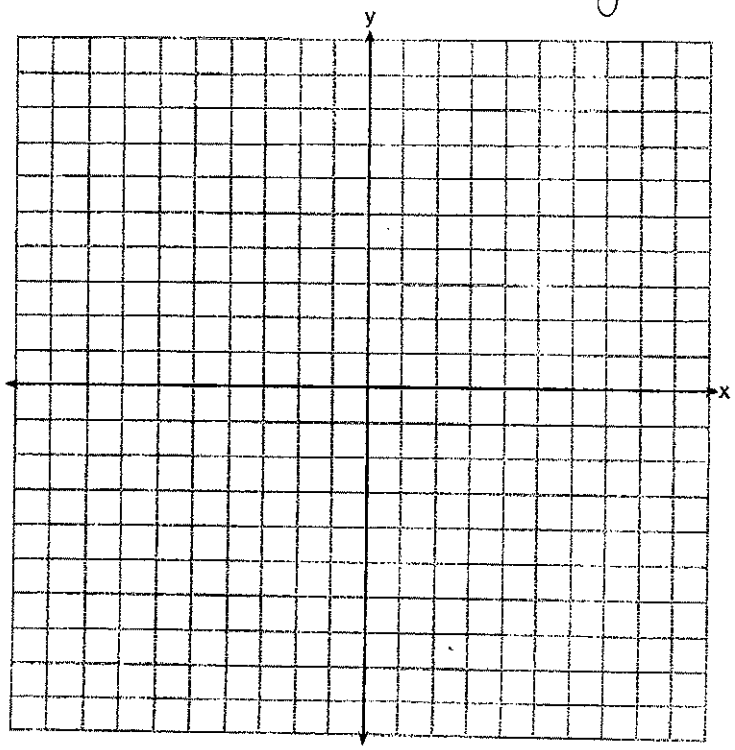
Name: _____ Date: _____

Coordinate Geometry Review

(PreIB only)

1. The vertices of triangle ABC are A(7, 1), B(7, 5), and C(10, 1). Find the ~~area of the triangle using the distance formula.~~ distance of $\overline{BC}$ (grid is optional)



2.

What are the coordinates of the midpoint of the line segment whose endpoints are $(c,0)$ and $(0,d)$?

3

Find the value of k so that the slope of the line joining $(4,k)$ and $(5,k^2)$ is 20.

4.

What is the slope of a line that is perpendicular to the line whose equation is $2x - y = 7$?

A) $-\frac{1}{2}$ B) $\frac{1}{2}$ C) -2 D) 2

Explain your answer: _____

5.

Write an equation of the line that passes through the points (-1,-2) and (5,1).

6.

The coordinates of the midpoint of line segment $\overline{AB}$ are (1,2). If the coordinates of point A are (1,0), find the coordinates of point B.

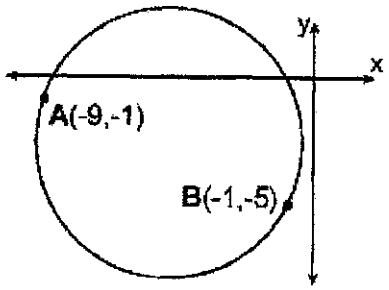
7.

Write an equation of the line parallel to the line $5y + 6x = 11$ and passing through the point (-3, 7).

8. Write the equation of the line, in slope-intercept form, that is the perpendicular bisector of the line segment having endpoints of (-4,-2) and (8, 4).

9.

$\overline{AB}$ is the diameter of the circle shown in the accompanying diagram.



What are the coordinates of the center of this circle?