Coordinate Geometry Review (Use Graph Paper For Problems without pics)

Partitioning a Segment

- 1. Directed line segment (vector) \overrightarrow{PQ} is shown here. What are the coordinates of the point 1/3 of the way from P(4,4) to Q(-2,1)?
- 2. Place the point that is $\frac{2}{3}$ of the way from R to S if \overrightarrow{RS} has endpoints R(-2, -2) and S(4, -1).

Coordinates, Distance, and Area

- 3. To the nearest tenth, find the <u>perimeter</u> of a triangle with vertices at (-3,4), (5,2), and (2,-2).
- 4. Find the <u>area</u> of the triangle shown here \rightarrow

Lines on the Coordinate Plane

5. On the grid below, graph the line that is parallel to the line with equation $-\frac{1}{3}x + y = 2$ and that passes through the point (3,0).



6. On the grid, graph the line that is the perpendicular bisector of the line segment with endpoints (-2,4) and (2,-2).





7. Write the equation of a line perpendicular to $y = \frac{2}{3}x - 4$ that passes through (-1,4).

