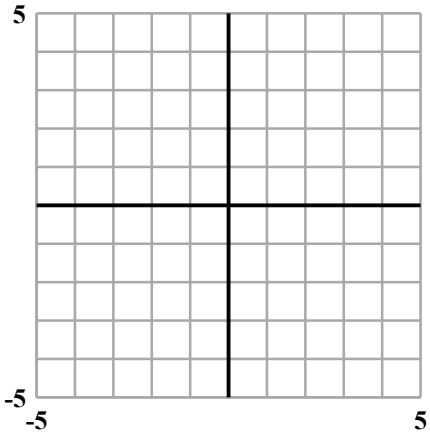
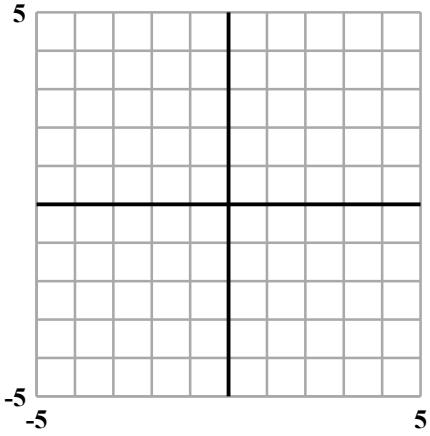
Lines, Segments, Graphing, & Equations **Name _____**
September 3, 2008

1. Plot the points: $A:(3,4)$ $B:(-2,1)$ then
   Calculate the length of $\overline{AB}$

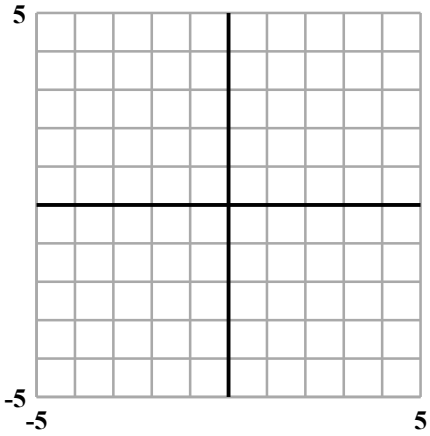


2. Plot the points: $C:(-5,2)$ $D:(3,-4)$.
   The midpoint of $\overline{CD}$ is $(-1,-1)$.
   Mark the coordinates of 7 points that are 5 units from the midpoint.

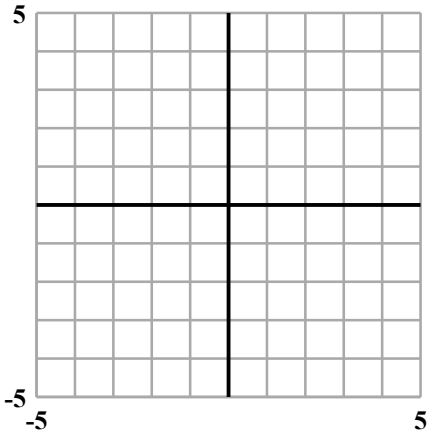


Graph each of the following lines.

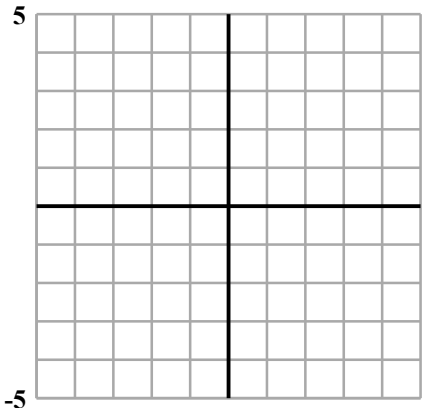
3. $y=-\frac{2}{3}x+1$



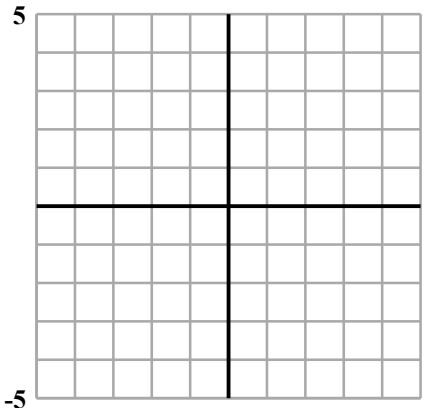
4. $5x-2y=10$



3. $y=-\frac{1}{2}x+\frac{5}{2}$

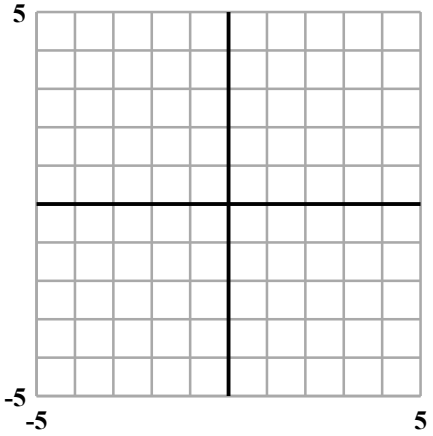


4. $y-1=\frac{1}{4}(x-2)$

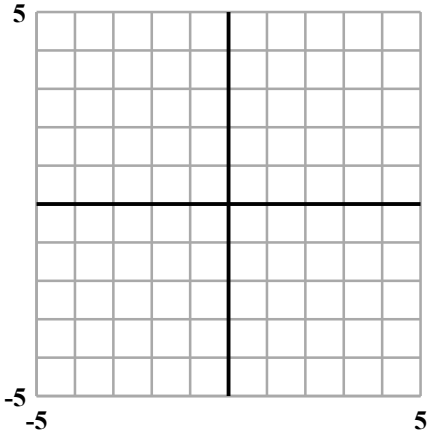


Plot each the given points, draw a line through the points, then write the equation of the line you drew.

7. $(-3,0)$ & $(0,2)$

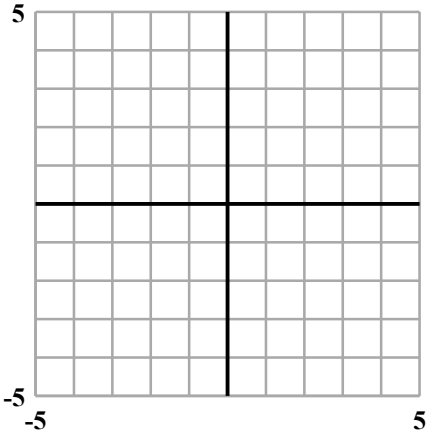


8. $(-1,4)$ & $(5,-2)$



Sketch the graph of each line. In each case, label the origin point *O*, label the *y*-intercept point *B*, and label the *x*-intercept point *A*. Finally, calculate the area and perimeter of triangle *AOB*.

9. $y = -\frac{4}{3}x + 4$



10. $\frac{3}{2}x - \frac{3}{4}y = 3$