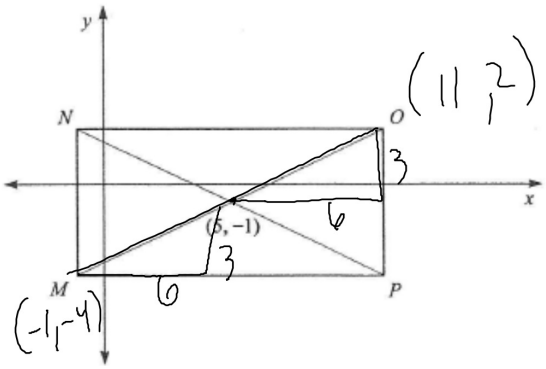
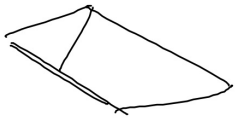
17. As shown below, the diagonals of rectangle $MNOP$ intersect at the point $(5,-1)$ in the standard (x,y) coordinate plane. Point M is at $(-1,-4)$. Which of the following are the coordinates for point O?

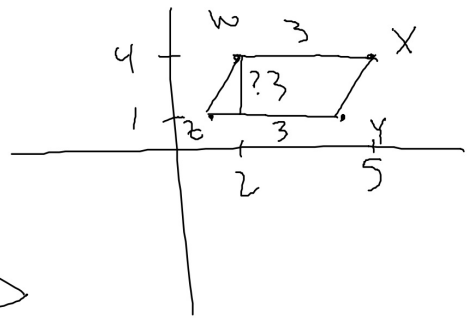


A. $(-6,2)$
B. $(-1,4)$
C. $(9,3)$
D. $(10,-3)$
E. $(11,2)$

49. What is the area of quadrilateral $WXYZ$ if it has vertices with (x,y) coordinates $W(2,4)$, $X(5,4)$, $Y(4,1)$, and $Z(1,1)$?

A. $\sqrt{17}$
B. 6
C. 9
D. $8\sqrt{2}$
E. 18





51. In the (x,y) coordinate plane, what is the radius of the circle having the points $(-4,4)$ and $(0,-2)$ as endpoints of a diameter?

A. $\sqrt{7}$
B. $2\sqrt{2}$
C. $\sqrt{13}$
D. $2\sqrt{7}$
E. $2\sqrt{13}$

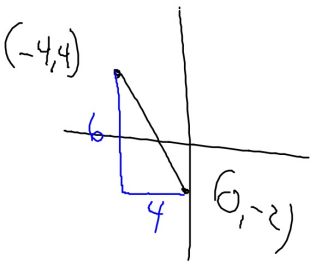
$d = \sqrt{(x-x)^2 + (y-y)^2}$

$\sqrt{4^2 + 6^2}$

$\sqrt{16+36}$

$\sqrt{52} = \sqrt{4 \cdot 13}$

$\frac{2\sqrt{13}}{2}$



57. Jordan has been hired to build a circular wading pool in his neighbor's backyard. The rectangular backyard measures 40 feet wide by 70 feet long. Jordan's neighbors want the pool to be as large as possible, with the edge of the pool at least 4 feet from the edge of the backyard all around. How long should the radius of the pool be, in feet?

A. 16
~~B. 32~~
~~C. 36~~
~~D. 40~~
~~E. 62~~