

3.3.D2 – Area & Perimeter of Parallelograms

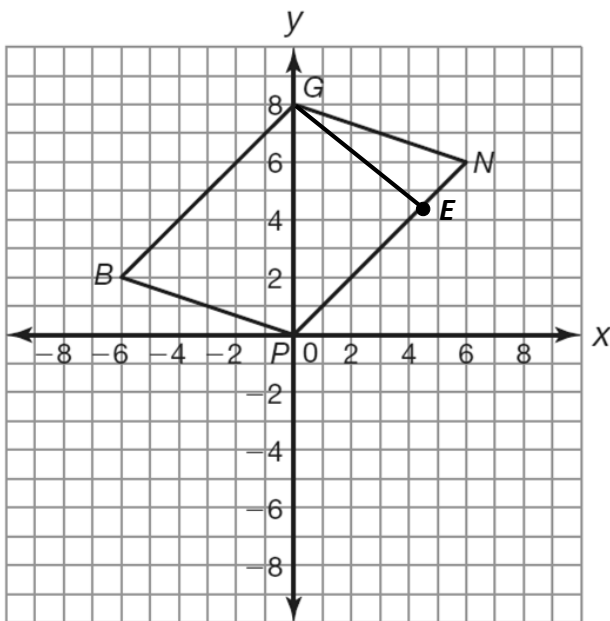
Show all work on a separate sheet of paper.

A parallelogram is graphed on the coordinate plane; its base has been identified. For each parallelogram, determine:

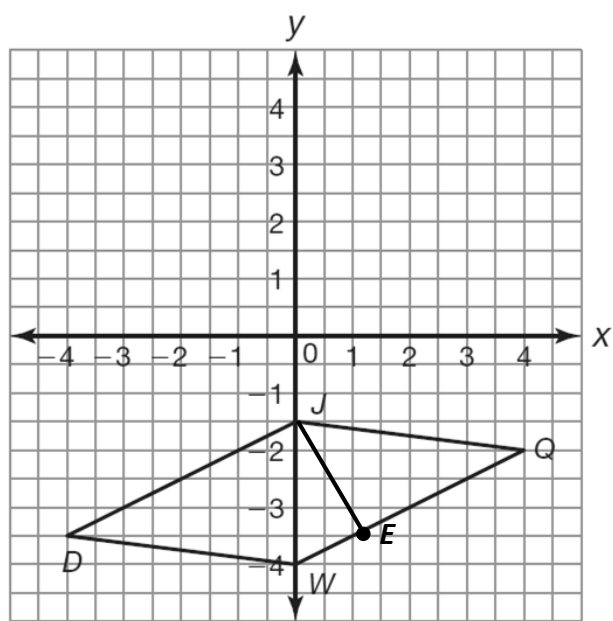
- the perimeter of the parallelogram;
- the coordinates of point E ;
- the height of the parallelogram; and
- the area of the parallelogram.

Round your answer to the nearest hundredth, if necessary.

1. $BGNP$, with base \overline{PN}



2. $DJQW$, with base \overline{QW}



How to find the coordinates of point E

- Find the slope of the base
- Find the slope of the height
- Find the equation of the base
- Find the equation of the height
- Set up and solve a system of equations.

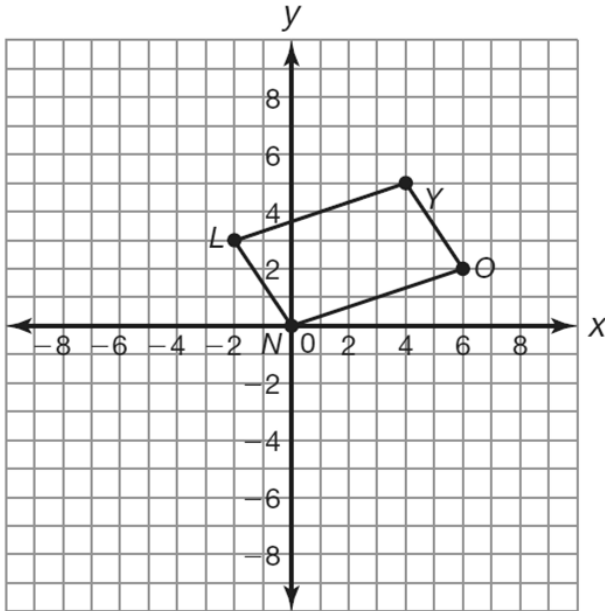
What are the coordinates of E ?

A parallelogram is graphed on the coordinate plane.

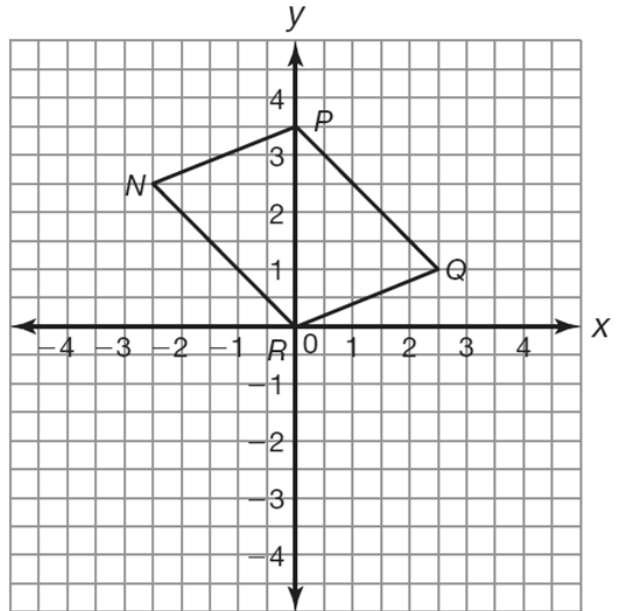
- (a) Determine the perimeter of the parallelogram.
- (b) Use the boxing method to find the area of the parallelogram.

Round your answer to the nearest hundredth, if necessary.

3.



4.

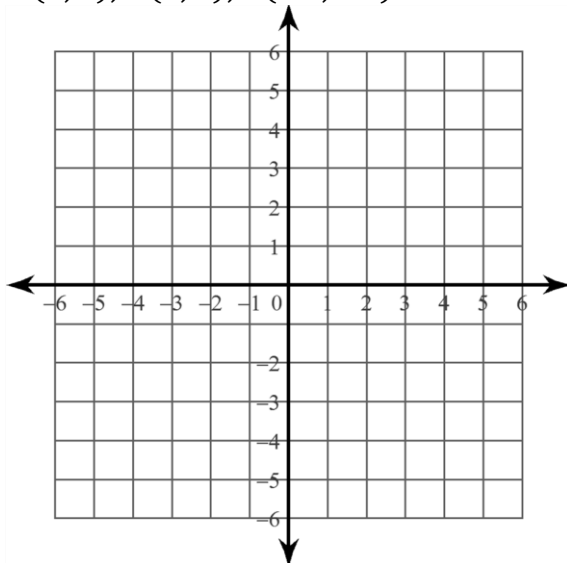


Graph the figure with the given set of points.

- (a) Determine the perimeter of the figure.
- (b) Use the boxing method to find the area of the figure.

Round your answer to the nearest hundredth, if necessary.

5. $A(1, 3), B(5, 2), C(-3, -3)$



6. $D(1, 4), E(2, 3), F(0, -3), G(-3, 1)$

