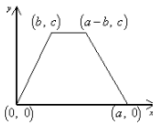
Coordinate proofs

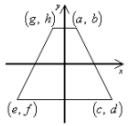
Variables

Which diagram shows the most useful positioning and accurate labeling of an isosceles trapezoid in the coordinate plane?

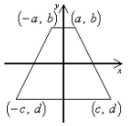
A.



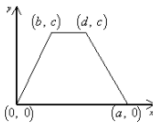
C.



B.

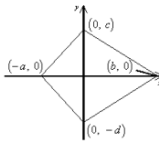


D.

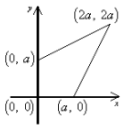


Which diagram shows the most useful positioning and accurate labeling of a kite in the coordinate plane?

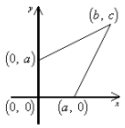
A.



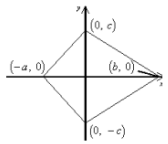
C.



B.

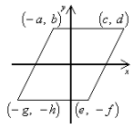


D.

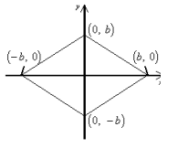


Which diagram shows the most useful positioning and accurate labeling of a rhombus in the coordinate plane?

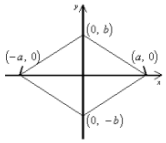
A.



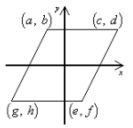
C.



B.

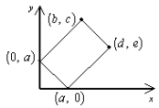


D.

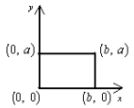


Which diagram shows the most useful positioning of a rectangle in the first quadrant of a coordinate plane?

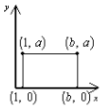
A.



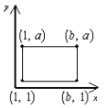
C.



B.



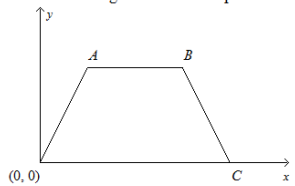
D.



In the coordinate plane, three vertices of rectangle $HIJK$ are $H(0, 0)$, $I(0, d)$, and $K(e, 0)$. What are the coordinates of point J?

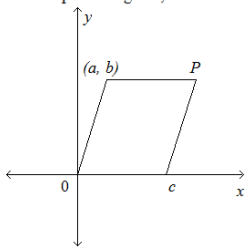
A. (e, d) B. $\left(\frac{d}{2}, \frac{e}{2}\right)$ C. $(2e, 2d)$ D. (d, e)

The vertices of the trapezoid are the origin along with $A(4p, 4q)$, $B(4r, 4q)$, and $C(4s, 0)$. Find the midpoint of the midsegment of the trapezoid.



A. $(p + r + s, 2q)$
B. $(p + r + s, q)$
C. $(2p + 2s, 2q)$
D. $(2r, 2q)$

For the parallelogram, find coordinates for P without using any new variables.



A. $(a + c, b)$ B. $(a - c, c)$ C. (c, a) D. (c, b)