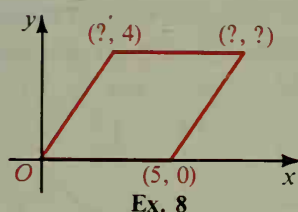
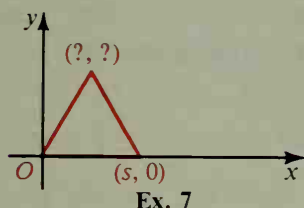
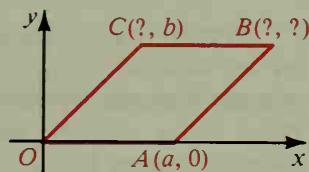


- B** 7. An equilateral triangle is shown below. Express the missing coordinates in terms of s .



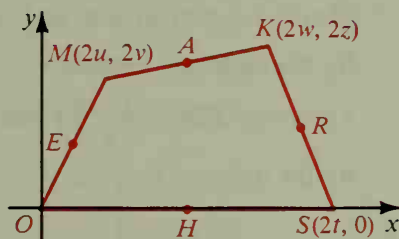
8. A rhombus is shown above. Find the missing coordinates.

9. Rhombus $OABC$ is shown at the right. Express the missing coordinates in terms of a and b . (Hint: See Exercise 8.)



10. Supply the missing coordinates to prove: The segments that join the midpoints of opposite sides of any quadrilateral bisect each other. Let H , E , A , and R be the midpoints of the sides of quadrilateral $SOMK$. Choose axes and coordinates as shown.

- R has coordinates $(\underline{\quad}, \underline{\quad})$.
- E has coordinates $(\underline{\quad}, \underline{\quad})$.
- The midpoint of \overline{RE} has coordinates $(\underline{\quad}, \underline{\quad})$.
- A has coordinates $(\underline{\quad}, \underline{\quad})$.
- H has coordinates $(\underline{\quad}, \underline{\quad})$.
- The midpoint of \overline{AH} has coordinates $(\underline{\quad}, \underline{\quad})$.
- Because $(\underline{\quad}, \underline{\quad})$ is the midpoint of both \overline{RE} and \overline{AH} , \overline{RE} and \overline{AH} bisect each other.



Draw the figure named. Select axes and label the coordinates of the vertices in terms of a single letter.

- C** 11. a regular hexagon 12. a regular octagon
13. Given isosceles trapezoid $HOJK$ and the axes and coordinates shown, use the definition of an isosceles trapezoid to prove that $e = c$ and $d = a - b$.

