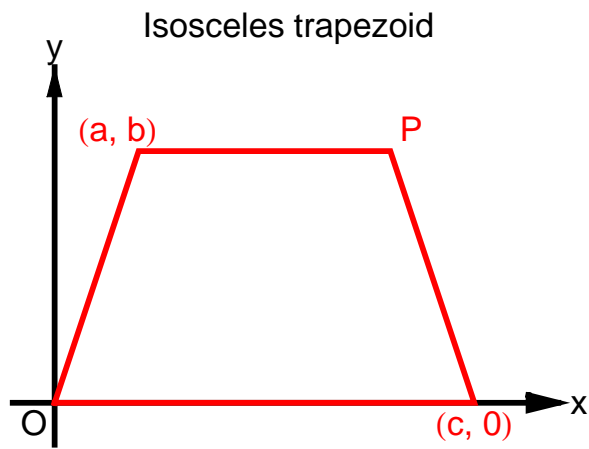


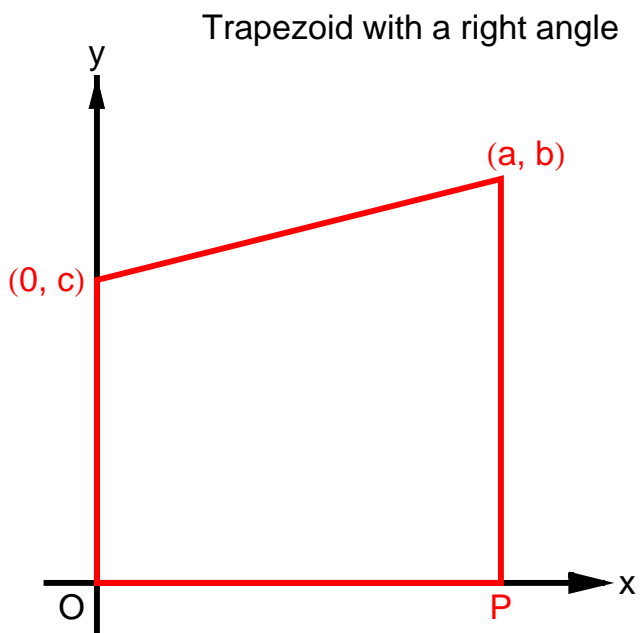
Worksheet 11.5: Coordinate Proofs

Give coordinates for point P without using any new variables.

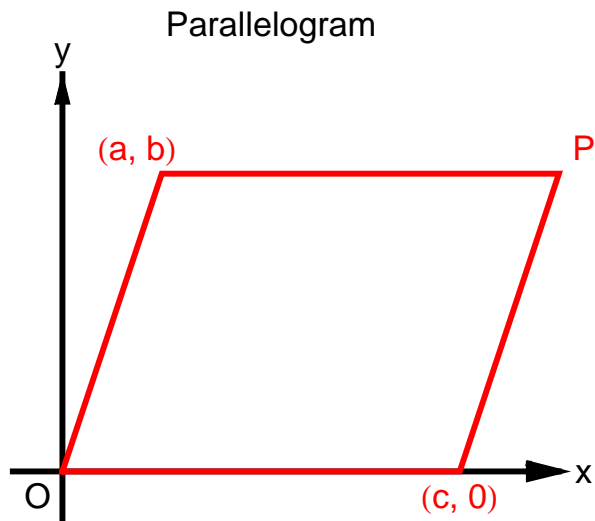
1.



2.



3.



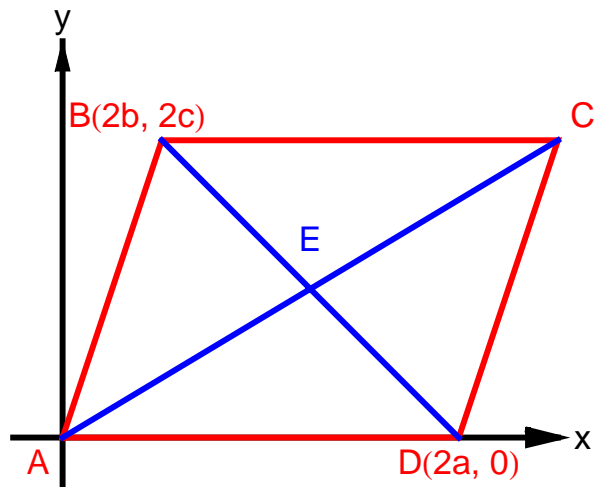
Complete the coordinates for each figure. Then use coordinate geometry to prove the statement.

4.

The diagonals of a parallelogram bisect each other.

Given: Parallelogram ABCD

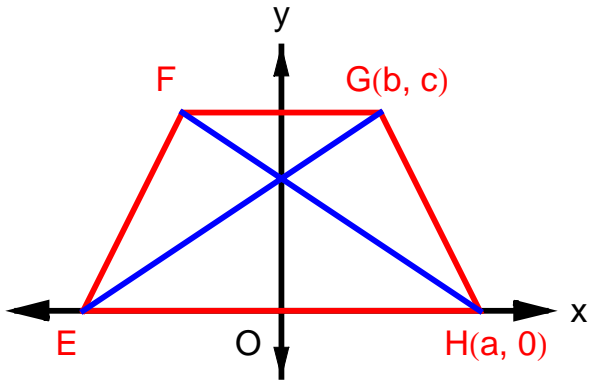
Prove: \overline{AC} bisects \overline{BD} , \overline{BD} bisects \overline{AC} .



5. The diagonals of an isosceles triangle are congruent.

Given: Trapezoid EFGH, $\overline{FE} \cong \overline{GH}$

Prove: $\overline{EG} \cong \overline{HF}$.



6. The segments joining the midpoints of consecutive sides of an isosceles trapezoid form a rhombus.

Given: Trapezoid TRAP with $\overline{TR} \cong \overline{AP}$, D, E, F, and G are midpoints of the indicated sides.

Prove: DEFG is a rhombus.

