Area of a triangle*

John T. Baldwin

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1) Draw on a piece of graph paper a line segment with end points (0,0) and (6,8). Plot all point (x,y) such that the triangle with vertices (0,0), (6,8), (x,y) has an area of 20 square units.

2) What two basic geometric theorems are needed to solve this problem?

3) What are some ways to scaffold or extend this problem to deal with students with differing backgrounds?

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