

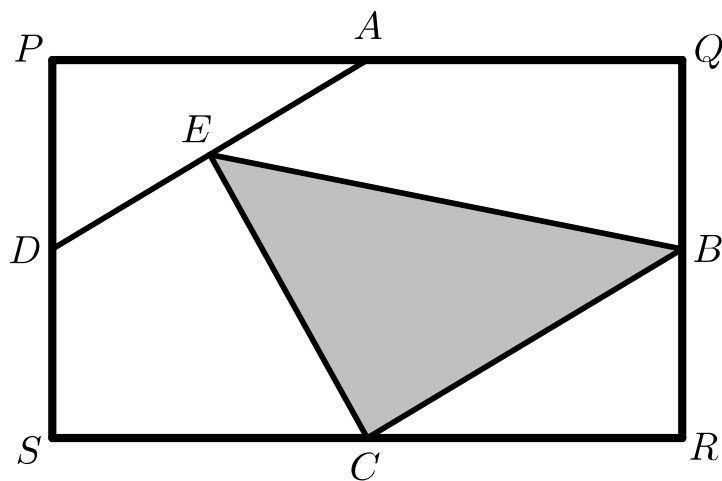


Problem of the Week

Problem E

Always True?

In the following diagram, $PQRS$ is a rectangle with $PQ = SR$ and $PS = QR$.



The points A , B , C , and D are the midpoints of sides PQ , QR , RS , and SP , respectively. The point E is the midpoint of line segment AD .

Show that it is always true that the area of rectangle $PQRS$ is four times the area of $\triangle BCE$.

