



## Problem of the Week

### Problem E

#### So Many Triangles

$\triangle PQR$  has side  $QP$  extended to  $X$  so that  $QP = PX$ ,  $PR$  extended to  $Z$  so that  $PR = RZ$ , and  $RQ$  extended to  $Y$  so that  $RQ = QY$ .

If the area of  $\triangle XYZ = 1176 \text{ cm}^2$ , determine the area of  $\triangle PQR$ .

