

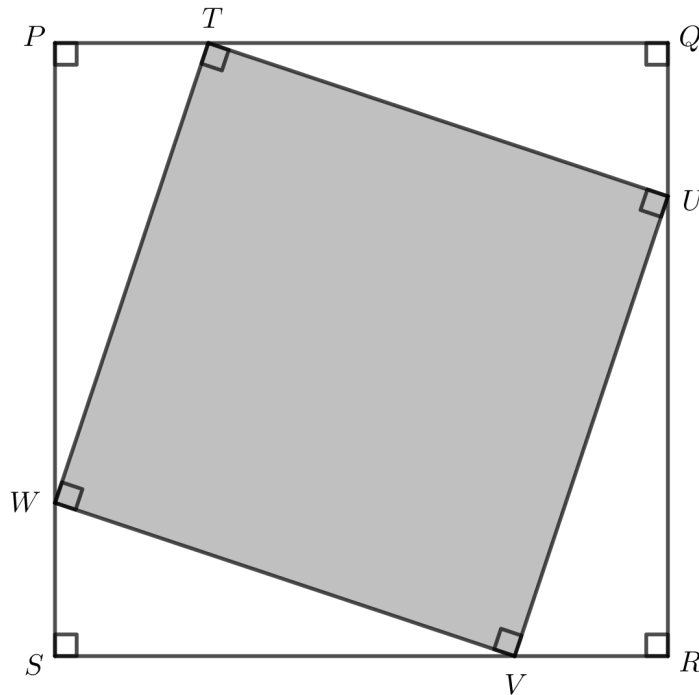


## Problem of the Week

### Problem C

### A Square in a Square

In the diagram,  $PQRS$  is a square. Points  $T$ ,  $U$ ,  $V$ , and  $W$  are on sides  $PQ$ ,  $QR$ ,  $RS$ , and  $ST$ , respectively, forming square  $TUVW$ .



If  $PT = QU = RV = SW = 4$  m and  $PQRS$  has area  $256$  m<sup>2</sup>, determine the area of  $TUVW$ .