

8.1 p. 432 #4

9d

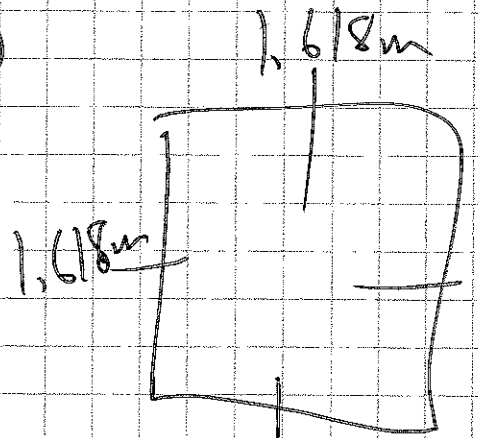
S1  $P = \$165 \div \$25.50/m \approx 6.47059 \text{ m}$   
total perimeter

S2  $W = \frac{6.47059}{4} \approx 1.618 \text{ m} = \text{optimal width}$

S3  $A = (1.618)(1.618)$

$\approx 2.617\dots$

$A \approx 2.62 \text{ m}^2$



$\therefore$  the dimensions of 1.618m x 1.618m  
will yield the greatest area of 2.62m<sup>2</sup>.