Quadrilateral and rectangles
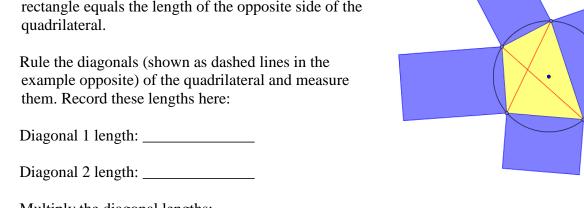
1   Use Maths–Pro or Geo–Pro to draw any cyclic quadrilateral
     (i.e. a quadrilateral whose corners are on the circumference of a circle).

2   Draw a rectangle on each side of the quadrilateral so
     that the length of the "non–quadrilateral side" of the
     rectangle equals the length of the opposite side of the
     quadrilateral.

3   Rule the diagonals (shown as dashed lines in the
     example opposite) of the quadrilateral and measure
     them. Record these lengths here:

     Diagonal 1 length: _____

     Diagonal 2 length: _____

4   Multiply the diagonal lengths:

     Diagonal 1 × Diagonal 2 = _____

5   Find the total area of the four rectangles:

     Rectangle 1 Area: _____

     Rectangle 2 Area: _____

     Rectangle 3 Area: _____

     Rectangle 4 Area: _____

     TOTAL rectangle Area: _____

6   Compare the total rectangle area with your answer in
     step 4.

7   Repeat the above for one or more different
     quadrilaterals.