Square inscribed in a triangle
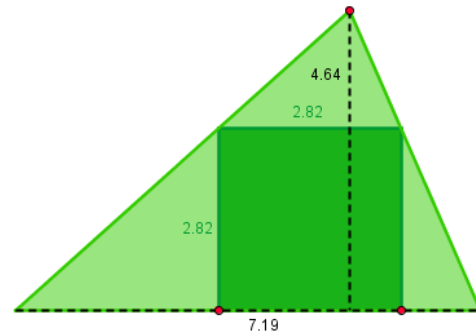
1   Use Maths–Pro or Geo–Pro to draw any square.

2   Draw a triangle that inscribes the square – an example
     is shown opposite.

3   Measure the base and height of the triangle (shown as
     dashed lines in the diagram):

     base of triangle $b =$ _____

     height of triangle $h =$ _____

4   Measure the side length of the square:

     side length of square $s =$ _____

5   Calculate $\dfrac{b \times h}{b + h}$. What do you notice?

6   Repeat steps 1 to 5 for a different square/triangle combination.