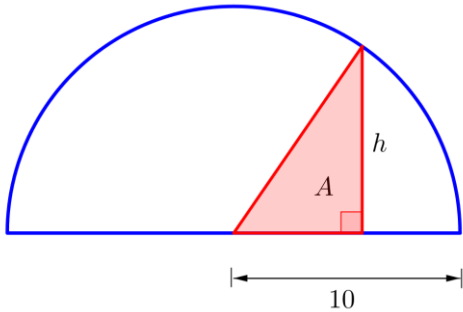


Modeling with Functions

(covers parts of Sullivan 2.6)

Ex 1.

A right triangle is inscribed in a semicircle of radius 10. Find a function in one variable that models the area A of the triangle in terms of its height h .



Ex 2.

A property owner wants to fence a rectangular garden with one side against a straight road. Most of the fencing costs \$3 per foot, but the fencing next to the road must be sturdier and costs \$4 per foot. The owner wants to have an area of 900 ft^2 . Find a function in one variable that models the cost of fencing the garden.