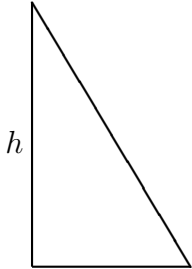


4. (5) Dennis now decides that he wants to construct an additional emu pen. For reasons known only to him, he has decided to construct the pen in the shape of a right triangle. If the pen will have an enclosed area of 150 square yards, determine a function which gives the perimeter of the pen as a function of the length of the labeled side, h .



5. (5) Suppose three adjacent pens are constructed as shown in the diagram below. The pen will be constructed of two different fencing materials– the exterior fencing will cost \$4 per yard and the interior fencing will cost \$3 per yard. Determine a model, in terms of the labeled side, x , for the **cost** of fencing needed, given that the total enclosed area is 2000 yd² square yards.

