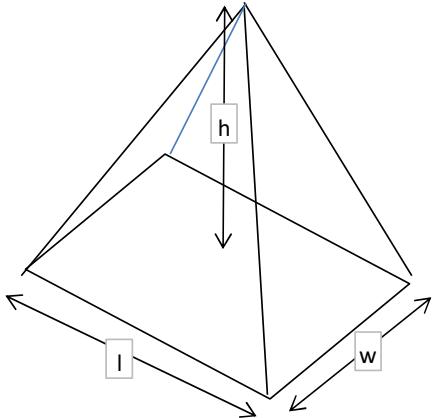
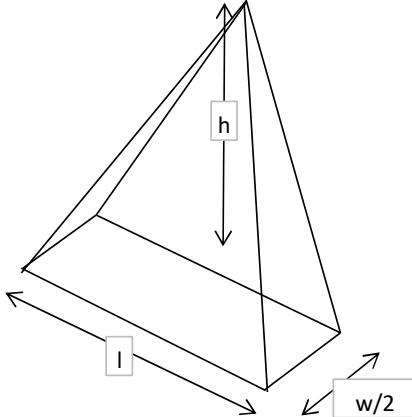


		Project 18 Hillside Road Part of Structure Hip to gable volume calc			Project no SKMPD/18HS Page of 1 1	
		Drawing Ref	Prepared SKM	Date	Rev N/a	Date N/a
Subject						
for a rectangular pyramid Volume = $(l * w * h) / 3$						
for half a rectangular pyramid Volume = $(l * (w/2) * h) / 3$						
Hip to gable volume = prism comprising gable side face, less half pyramid						
Triangular Prism Volume Proposed (including existing pitch): Gable external height 3.4 m Gable base external length (overall house depth) 8.15 m Prism length (distance from gable wall to original ridge) 4.2 m <u>Volume of triangular prism = 0.5*h*b*l</u> <u>58.19 m³</u>						
Half Rectangular Pyramid Volume (volume of existing pitch): w/2 i.e. distance from gable wall to original ridge 4.2 m l (i.e. 2 x gable base) 8.15 m h (same as height of gable) 3.4 m <u>Volume</u> <u>38.794 m³</u>						
Net additional volume required for hip to gable <u>19.397 m³</u>					per gable	
Volume available for dormers (50m ³ allowance) 30.60 m ³ Dormer area = 2.76m height x 3.47 dormer depth / 2 4.79 m ² Dormer width total for both 6.39 m					3.19 each	