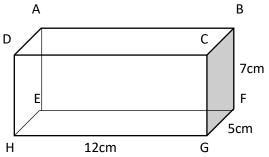
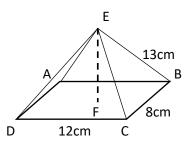
National 5 Homework	
Geometric Skills	Pythagoras in 3D

1. ABCDEFGH is a cuboid where GH = 12cm, FG = 5cm and BF = 7cm.

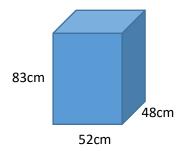


- a. Calculate the length of face diagonal FH.
- b. Calculate the length of space diagonal BH.
- ABCDE is a right pyramid on a rectangular base.
  EA = EB = EC = ED = 13cm.
  CD = 12cm and BC = 8cm. EF is the height of the pyramid.

Calculate the height EF.



3. A locker in the shape of a cuboid is shown below.



Tom is thinking of hiring a locker for his snooker cue.

If the length of the cue is 1.2 metres, will it fit into this locker?