**MA1 Week 16 Investigation**

Harry runs a farm. He uses half-cylinders water troughs, as shown, for the animals.



1. Calculate the volume of one water trough in cubic metres. Use 880 mm = 0.88 m and

610 mm = 0.61 m

b) How much water, in litres, is needed to fill one trough?

c) There are 25 water troughs on the farm. How much water is needed to fill all the troughs?

d) Harry uses a cylindrical tank on a trailer to fill the water troughs. Calculate the volume of the tank if its diameter is 1.56 m and its height is 1.21 m.

e) Can this tank hold enough water to fill all the troughs? If not, how many trips will Harry have to make?