**Summary:**

1000 variations. Similar triangles. Pythagoras.

**Question: 1000 Variations**

a) Δ LQP ~ Δ LMN. Find LM and MN.



[4]

b) A mobile tower  metres high has two parallel wires that join from the mast to the ground. The first, from the top if the mast, is  m long and is fastened on the ground  metres from the foot of the mast. The second is fastened on the ground m from the foot of the mast. Find the length of the second wire and how far up the mast it is fastened.

**Solution:**

a) 

b)



