

Without using mathematical tables, evaluate:

$$\sqrt{\frac{880}{0.11 \times 0.2}}$$

(3mk)

Four brothers together have sh 220. Gichinga has sh 120 less than Kago, Kago has three times as much as Muite and Muite has twice as much as Kamau. Suppose Kamau has sh  $x$ .

a) Write an equation in  $x$  to represent this information. (2mk)

b) Solve this equation. (2mk)

A dealer bought a car from an importer at sh 1,040,000. If the dealer sold it at a profit of 8%, how much was it sold? (2mk)

b The Imporcer Made a Profit of 30%. How much did he buy the car. (2m)

Q4 Draw a line AB of length 6cm, using a ruler and a pair of compasses only; Construct a line CA of length 5cm for which  $\angle CAB = 75^\circ$ . Measure BC. (5m)

15. The interior angle of a regular polygon is 9 times the exterior angle. How many sides does the polygon have? (3m)

76

Use the trigonometric tables to evaluate:

$$\sqrt{\frac{8.46^3 + 9.76^2}{4 \sin 30}}$$

(4 marks)

77

On a map, with scale factor 1:50,000, a coffee plantation covers an area of 20 km<sup>2</sup>. Find the area of the plantation in hectares.

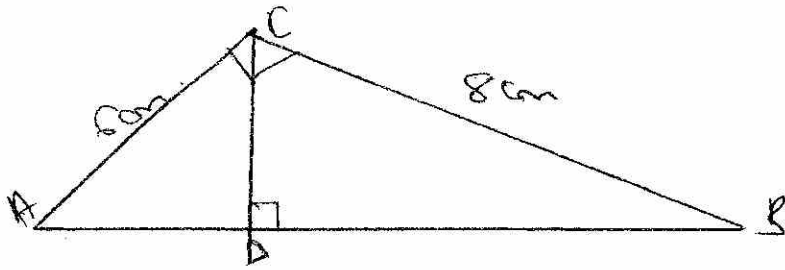
(4 marks)

78

The ratio of the radii of two spheres is 2:3. Calculate the volume of the smaller sphere if the volume of the larger is 20 cm<sup>3</sup>. 3 marks.

9

The figure below shows a triangle ABC which is right angled at C.  $CB = 8\text{ cm}$  and  $AC = 6\text{ cm}$ . Find CD.



Answer