

M is the midpoint of AB.

F is the point on MC such that MF:FC = 1:2

The vertex V is vertically above F. VA = VB = VC

Angle $VCM = 52^{\circ}$ $VF = 8 \,\mathrm{cm}$

Work out the side length of the equilateral triangle ABC.

Give your answer correct to 1 decimal place.