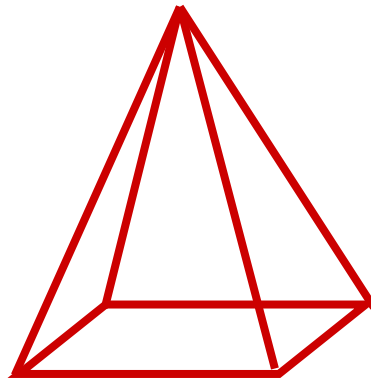
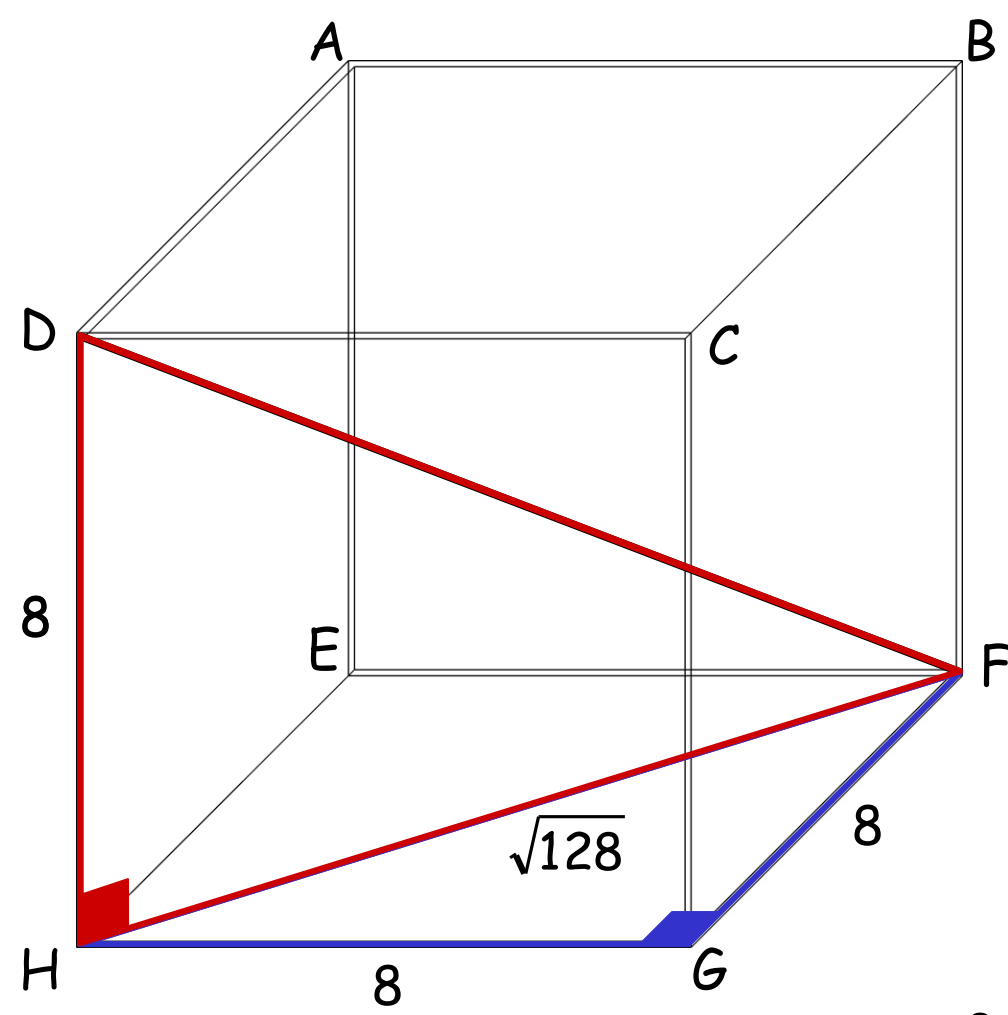


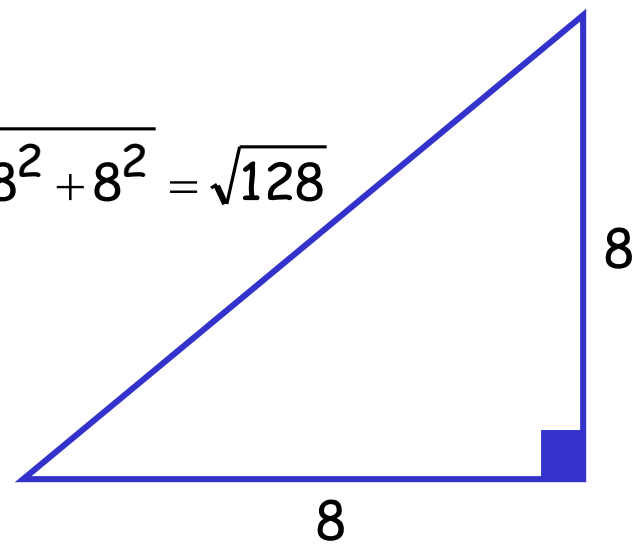
3D-TRIG



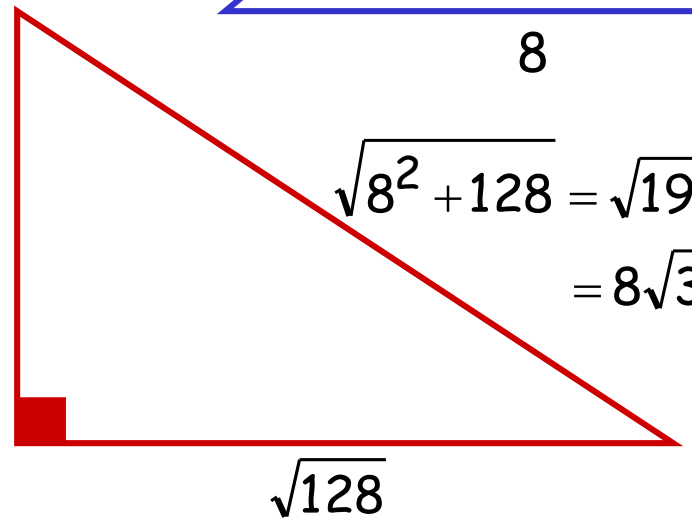
Name the angle between space diagonal DF and plane EFGH and calculate the length of DF in this cube of side 8cm.



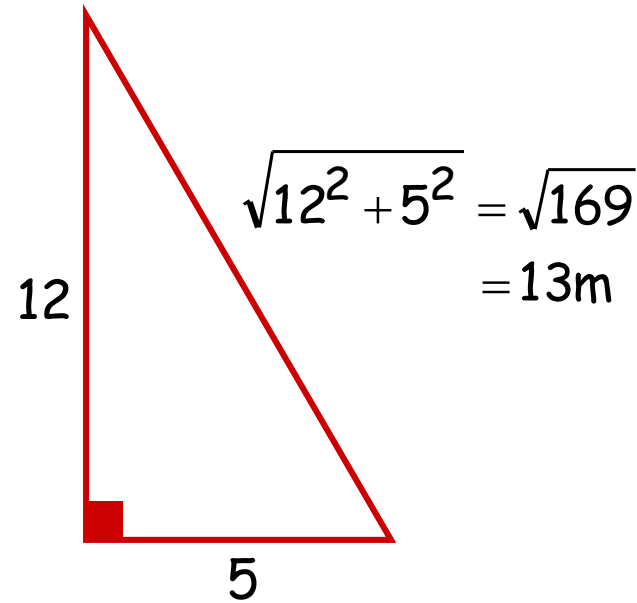
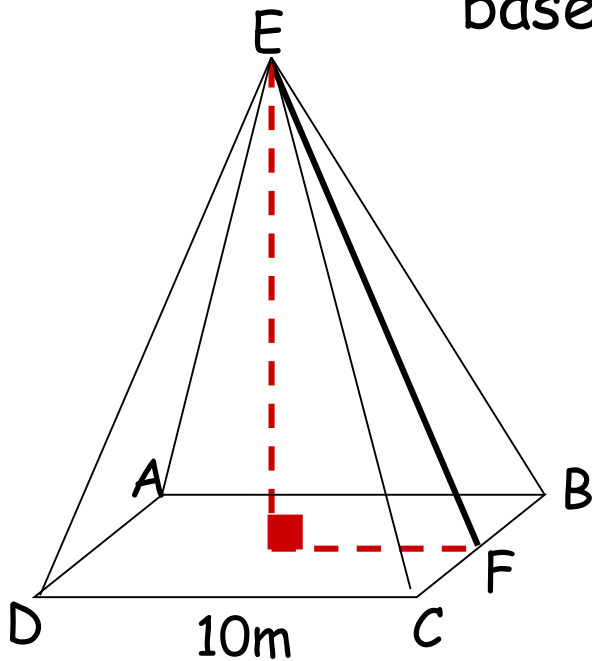
$$\sqrt{8^2 + 8^2} = \sqrt{128}$$



$$\begin{aligned} \sqrt{8^2 + 128} &= \sqrt{192} \\ &= 8\sqrt{3} \end{aligned}$$

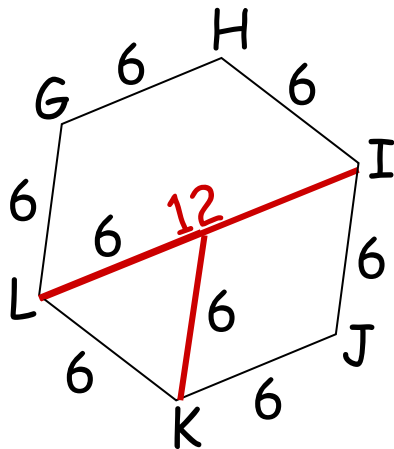
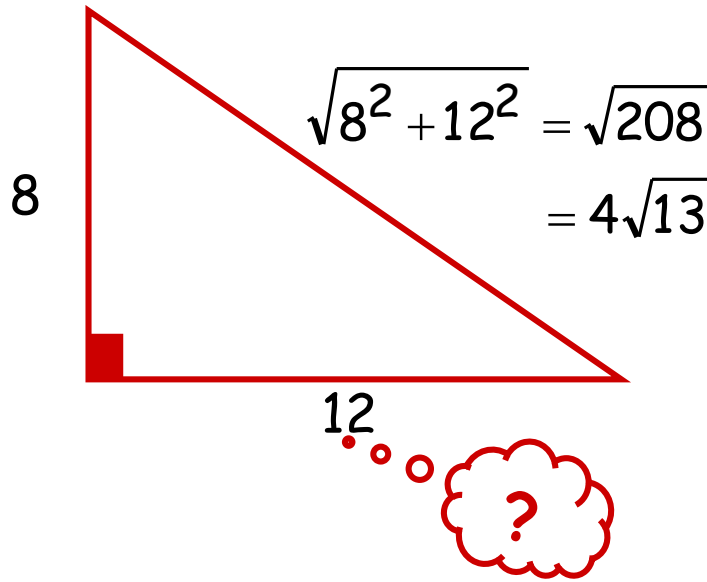
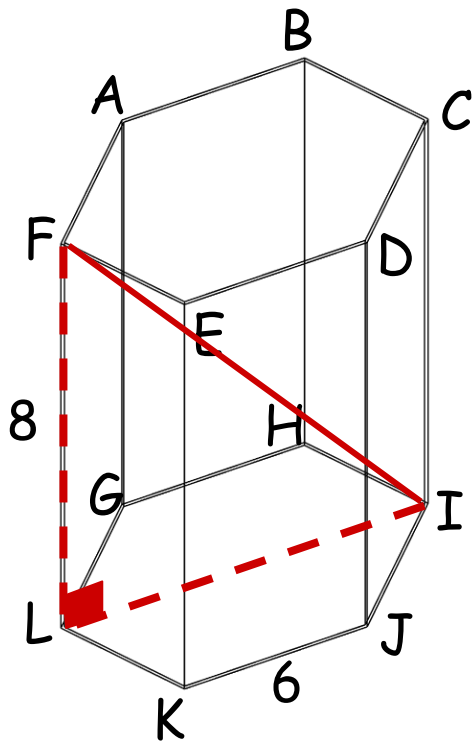


Calculate the length of EF in this square based pyramid of side 10m and height 12m.



Name the angle between line EB and face ABCD. $\angle EBD$

Calculate the length of space diagonal FI in this regular hexagonal prism of side 6m and height 8m.



Remember a regular hexagon consists of 6 equilateral triangles so the length of LI must be 12m.