## 3D Modelling Question

How would you model the visible portion of a cube?

Assuming the cube is seen in a general viewpoint, then an observer would see a corner and three planes. One possible scheme is to model a square, and then move 3 copies of it into position. Another scheme is to make a wire-frame model of the 9 visible edges (with edge length L):

$$
\begin{array}{lll}
(0,0,0)-(\mathrm{L}, 0,0) & (0,0,0)-(0, \mathrm{~L}, 0) & (0,0,0)-(0,0, \mathrm{~L}) \\
(\mathrm{L}, 0,0)-(\mathrm{L}, 0, \mathrm{~L}) & (0,0, \mathrm{~L})-(\mathrm{L}, 0, \mathrm{~L}) & (\mathrm{L}, 0,0)-(\mathrm{L}, \mathrm{~L}, 0) \\
(0, \mathrm{~L}, 0)-(\mathrm{L}, \mathrm{~L}, 0) & (0, \mathrm{~L}, 0)-(0, \mathrm{~L}, \mathrm{~L}) & (0,0, \mathrm{~L})-(0, \mathrm{~L}, \mathrm{~L})
\end{array}
$$

Sketch this shape!

