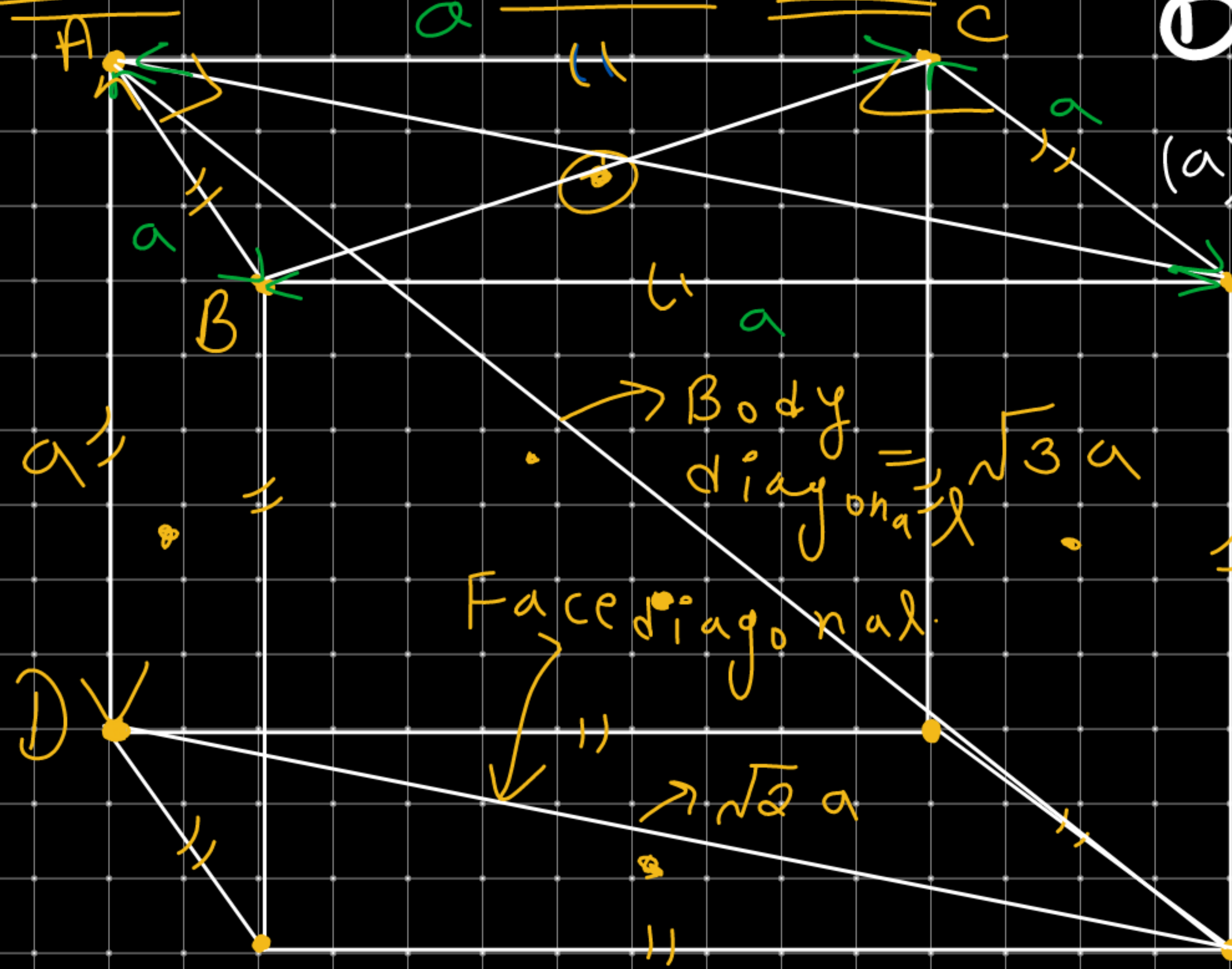


Information of Cube :-



① No of.

(a) Corners = 8

(b) Edges = 12

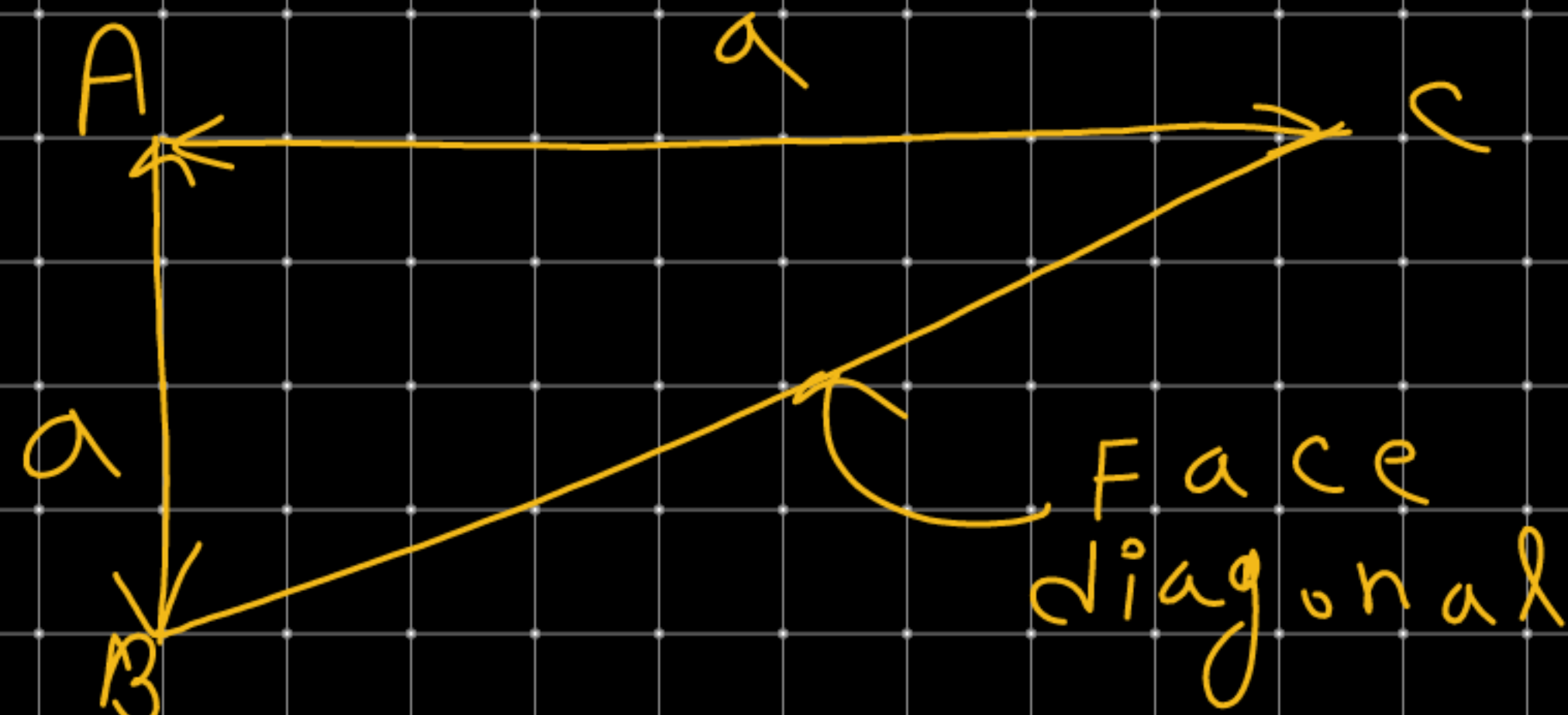
(c) Faces = 6

or
Face centre = 6

(d) Body centre = 1

(e) Face diagonal = 12
(2-diagonal in each face)

(f) no. of body diagonal = 4



$$\begin{aligned}(Bc)^2 &= (Ac)^2 + (AB)^2 \\ &= a^2 + a^2 \\ &= 2a^2\end{aligned}$$

$$Bc = \sqrt{2} a$$

(a) length of

$$\text{Face diagonal} = \sqrt{2} a$$

$$\text{Body diagonal} = \sqrt{3} a$$