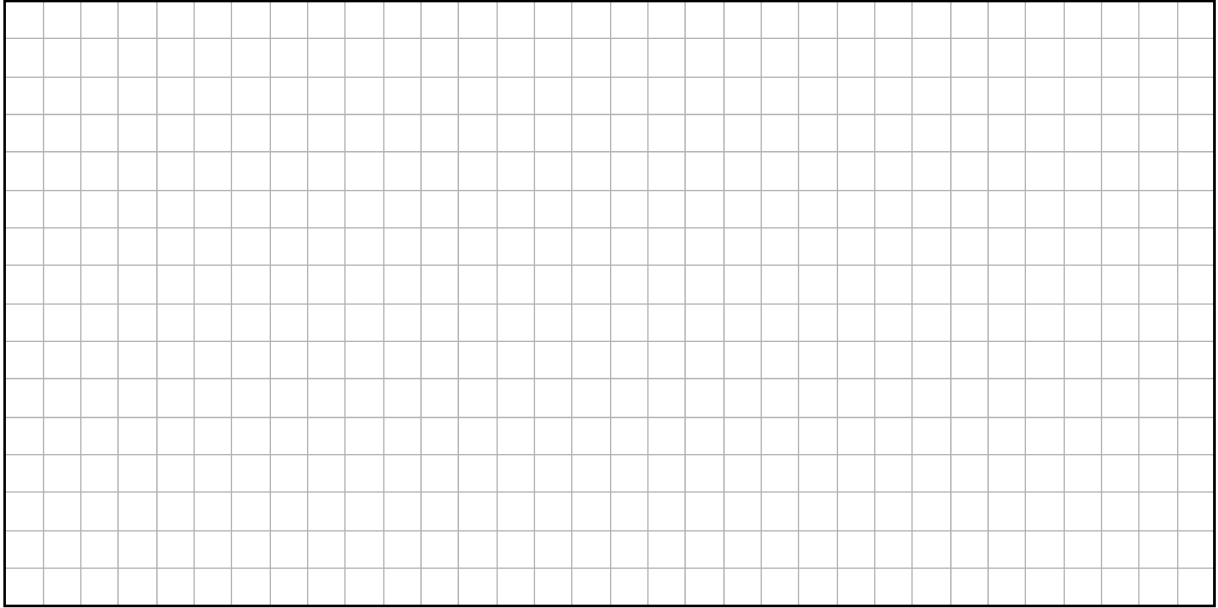


Question 4

(25 marks)

(a) Show that $\cos 2\theta = 1 - 2 \sin^2 \theta$.



(b) Find the cosine of the acute angle between two diagonals of a cube.

