

Physical quantities and units

Cambridge International AS & A Level Physics

Unlike IGCSE, 9702 gives you a data sheet: it is page 2 of Papers 1, 2 and 4, with more formulae on page 3 of Paper 4. Everything marked GIVEN is printed for you; everything else you must recall. Compiled by GioPhysics from the published syllabus. This is an independent study aid, not a Cambridge document; the official syllabus is the authority.

1.4 Scalars and vectors

AS

Components of a vector

$$F_x = F \cos \theta \cdot F_y = F \sin \theta$$

F — magnitude of the vector

θ — angle to the chosen axis ($^\circ$ or rad)

The syllabus requires a vector to be represented as two perpendicular components, and coplanar vectors to be added and subtracted.