

Centre of Mass - Contents (2 pages; 7/8/17)

Part 1

- (1) Objects for which the centre of mass may be determined
- (2) Centre of mass of a collection of point masses
- (3) Collection of point masses in 2D
- (4) Centre of mass of a solid (or hollow) object
- (5) Centre of mass of a lamina
- (6) Centre of mass of a uniform triangular lamina
- (7) Centre of mass of a uniform sector
- (8) Centre of mass of a rod
- (9) Centre of mass of a uniform circular arc
- (10) Centre of mass of a composite body
- (11) Hanging a lamina from one of its corners
- (12) Toppling: Lamina on a rough slope

Part 2

- (13) Centre of mass of triangular lamina (proof) – Part 1
- (14) Centre of mass of triangular lamina (proof) – Part 2
(Distance along the medians)
- (15) Centre of mass of triangular lamina (proof) – Part 3:
Location of the centre of mass in terms of the coordinates of the vertices
- (16) Centre of mass of triangular lamina (proof) – Part 4 : Right-angled Triangle
- (17) Centre of mass of a uniform sector (proof by integration)

(18) Centre of mass of a uniform circular arc (proof by integration)

(19) Centre of mass of a general lamina (proof by integration)

(20) Centre of mass of a right-angled triangular lamina (proof by integration)

(21) Centre of mass of cone (proof by integration)

(22) Centre of mass of conical shell

(23) Centre of mass of hemispherical shell (proof by integration)