

**INTEGRATION (Q 8, PAPER 1)**

**LESSON NO. 8: APPLICATIONS OF INTEGRATION II: VOLUME**

**2005**

8 (c) (ii) Use integration methods to derive a formula for the volume of a cone.

**2003**

8 (c) (ii) Use integration methods to show that the volume of a sphere with radius  $r$  is  $\frac{4}{3}\pi r^3$ .

**ANSWERS**

**2005** 8 (c) (ii)  $V = \frac{1}{3}\pi r^2 h$