



3. Solve  $2\tan 2y \tan y = 3$  in the range  $0 \leq y \leq 2\pi$ . Give answers to 2dp.

4.

a) By expanding  $\sin(2A + A)$ , show that:

$$\sin 3A \equiv 3\sin A - 4\sin^3 A$$

b) Hence, or otherwise, solve:

$$16\sin^3\theta - 12\sin\theta - 2\sqrt{3} = 0, \text{ in the range } 0 < \theta < 2\pi$$