

**Engineering Tripos Part IIA Module 3C1**  
**Manufacturing Engineering Tripos Part I Module 3P1**  
**2011**

**Numerical answers**

**Question 1.**

For  $m = 0$  (independent of  $\alpha$ ):  $h_o/h_i = 0.37$

For  $m = 1$ ,  $\alpha = 30^\circ$ :  $h_o/h_i = 0.63$