

7 Consecutive terms of a sequence are related by

$$u_{n+1} = 3 - (u_n)^2$$

7 (a) In the case that  $u_1 = 2$

7 (a) (i) Find  $u_3$

[2 marks]

7 (a) (ii) Find  $u_{50}$

[1 mark]

7 (b) State a different value for  $u_1$  which gives the same value for  $u_{50}$  as found in part (a)(ii).

[1 mark]