

# Iteration 1

Alan Windsor

Use Applet 1 to help you solve the equation

$$x^2 - 5x + 1 = 0$$

- Change the values of  $a$ ,  $x_0$  and  $t$  to  $a = 5$ ,  $x_0 = 1$  and  $t = 10$ . Write down the value of  $x_{10}$  correct to 2 decimal places.
  - What type of iteration is displayed, cobweb, divergent or staircase.
- Re-set the applet and set  $a = 8$  and  $x_0 = 2.5$ . Find the values of  $x_1$  to  $x_6$  correct to 2 decimal places.