

12th December



Corbettmaths

Make p the subject of the formula

$$p - 2 = \pi(y - 3p)$$

$$p - 2 = \pi y - 3\pi p$$

$$p + 3\pi p = \pi y + 2$$

$$p(1 + 3\pi) = \pi y + 2$$

$$p = \frac{\pi y + 2}{1 + 3\pi}$$

An approximate solution to an equation is found by using this iterative process.

$$x_{n+1} = 1 + \frac{1}{x_n}$$

$$x_2 = 1 + \frac{1}{1} = 2$$

$$x_3 = 1.5$$

$$x_4 = 1.6$$

$$x_5 = 1.6$$

$$x_6 = 1.625$$

$$x_7 = 1.6153\dots$$

$$x_8 = 1.61904\dots$$

Given

$$x_1 = 1$$

Work out the solution to 3 decimal places

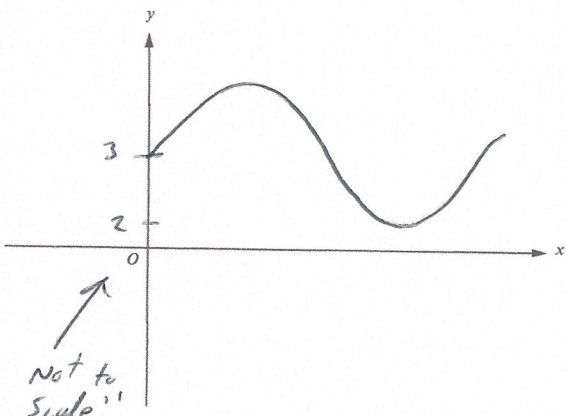
$$x_9 = 1.6176\dots$$

$$x_{10} = 1.61818\dots$$

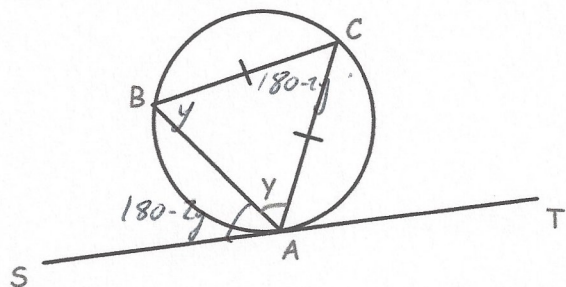
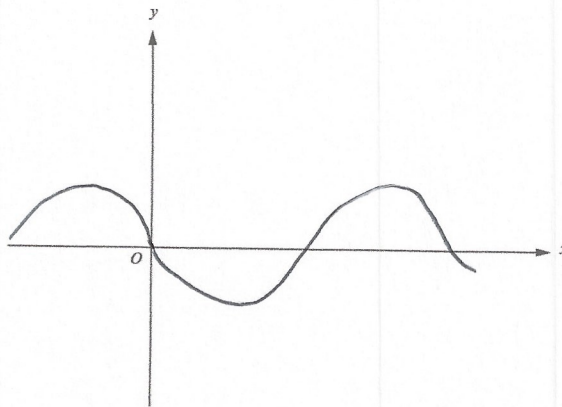
$$x_{11} = 1.6179$$

1.618

Sketch $y = 3 + \sin x$



Sketch $y = \sin(-x)$



Find an expression for angle SAT in terms of y .

$$180 - 2y$$