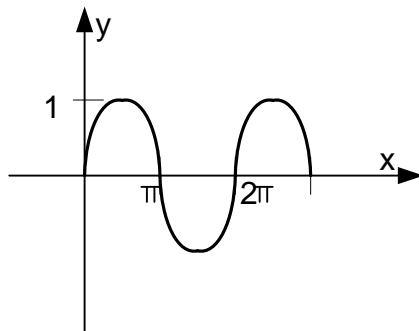


Solve the equation:  $|3 \sin \frac{3}{2} x| = 1 + \frac{6x}{5\pi}$

Sketching on the same diagram the graphs of  $y = \left|3 \sin \frac{3x}{2}\right|$  and  $y = 1 + \frac{6x}{\pi}$

$$\left| \sin \frac{3x}{2} \right| = 1 + \frac{6x}{\pi}$$

The graph of the function  $y = \sin x$

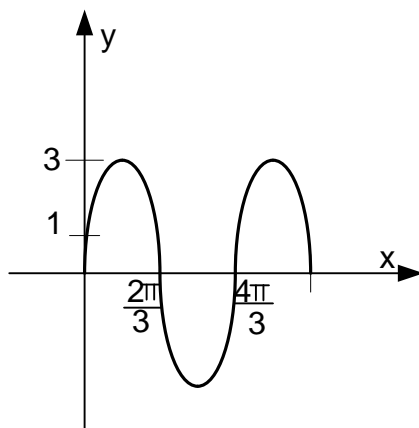


The amplitude  $y = 3 \sin \frac{3x}{2}$  is 3

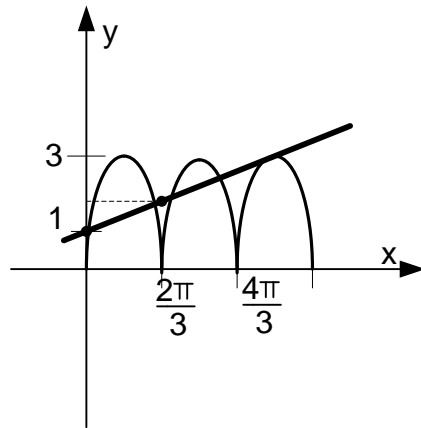
The period  $y = 3 \sin \frac{3x}{2}$  is

$$\frac{2\pi}{\frac{3}{2}} = \frac{4\pi}{3}$$

The graph of the function  $y = 3 \sin \frac{3x}{2}$



The graphs of the functions  $y = \left|3\sin\frac{3x}{2}\right|$  and  $y = 1 + \frac{6x}{\pi}$



So for  $0 < x < 2$  there are 2 solutions