

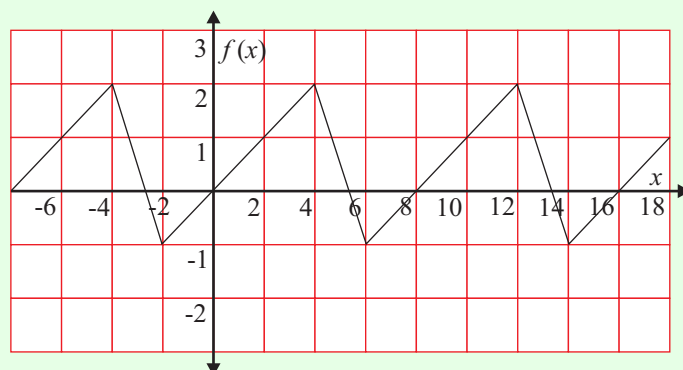
DIFFERENTIATION & FUNCTIONS (Q 6, 7 & 8, PAPER 1)

LESSON NO. 10: PERIODIC FUNCTIONS

2006

- 6 (a) $f : x \rightarrow f(x)$ is a periodic function defined for $x \in \mathbf{R}$.

The period is as indicated in the diagram.

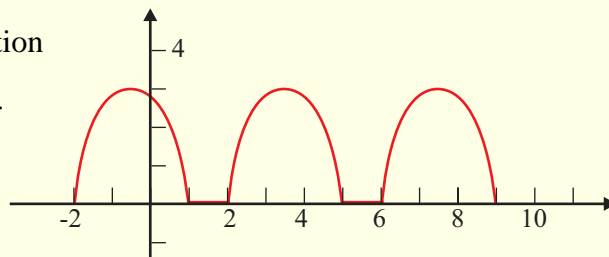


- (i) Write down the period and the range of the function.
- (ii) Find $f(44)$.

2003

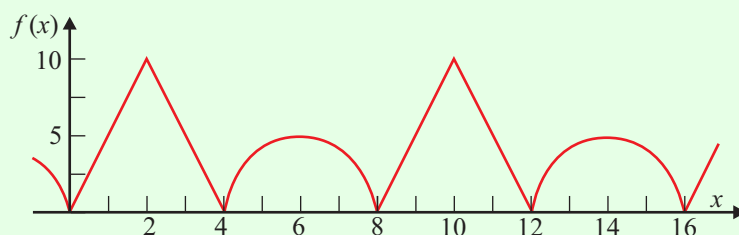
- 8 (a) Part of the graph of a periodic function is shown.

Write down the period and range of the function.



2000

- 6 (b)



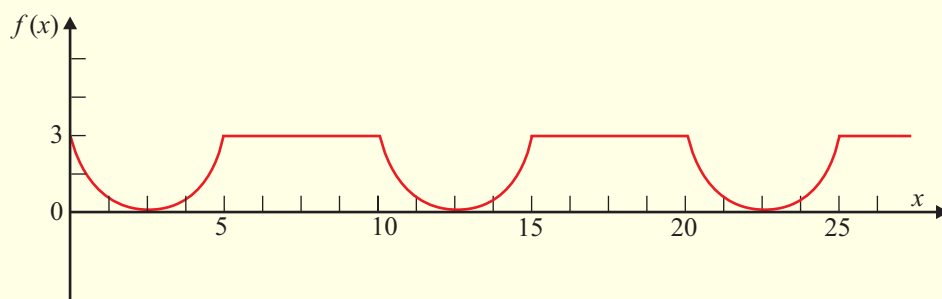
The graph shows portion of a periodic function $f : x \rightarrow f(x)$ which is defined for $x \in \mathbf{R}$.

- (i) Write down the period and the range of $f(x)$.
- (ii) Complete the following table:

x	2	8	14	20	26
$f(x)$					

1997

6 (a)



The graph shows portion of a periodic function $f : x \rightarrow f(x)$.

Write down the period and range of the function.

What is the value of $f(77.5)$?

ANSWERS

2006 6 (a) (i) 8, $[-1, 2]$ (ii) 2

2003 8 (a) 4; $[0, 3]$

2000 6 (b) (i) 8, $[0, 10]$

(ii)

x	2	8	14	20	26
$f(x)$	10	0	5	0	10

1997 6 (a) 10, $[0, 3]$; 3