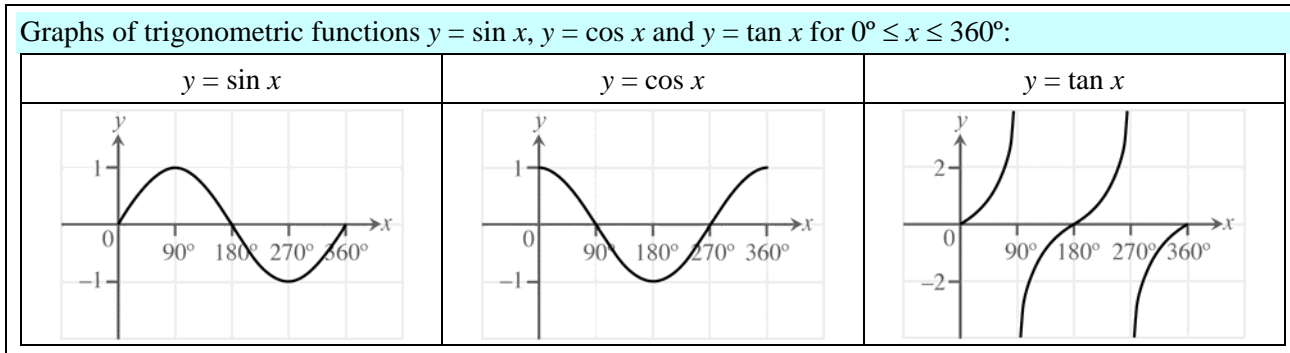


Lesson Worksheet 6.2(I)

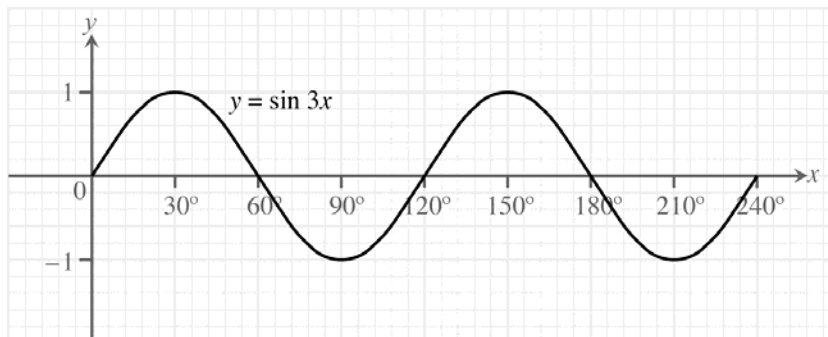
Objective: To recognize the graphs and the properties of trigonometric functions.



1. Using the above graphs, complete the following table for $0^\circ \leq x \leq 360^\circ$.

	$y = \sin x$	$y = \cos x$	$y = \tan x$
(a) Maximum value			/
(b) Minimum value			/
(c) x -intercepts			
(d) Period	360°	360°	

2. The figure shows the graph of the trigonometric function $y = \sin 3x$ for $0^\circ \leq x \leq 240^\circ$. → Exercise 6.2: 1 – 4



- The maximum value of $y = \sin 3x$ is _____.
- The minimum value of $y = \sin 3x$ is _____.
- The period of $y = \sin 3x$ is _____.

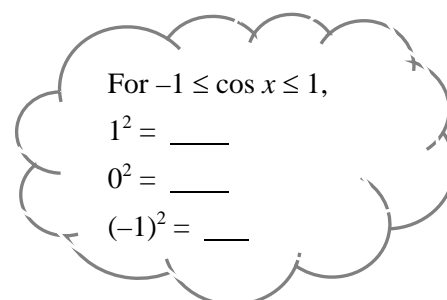
3. Find the maximum and minimum values of $4 \sin x$ algebraically.

4. Find the maximum and minimum values of $(3 + 2 \cos x)$ algebraically.

5. Find the maximum and minimum values of $(5 \sin x - 1)$ algebraically.

6. Find the maximum and minimum values of $\cos^2 x$ algebraically.

→Exercise 6.2: 5 – 10

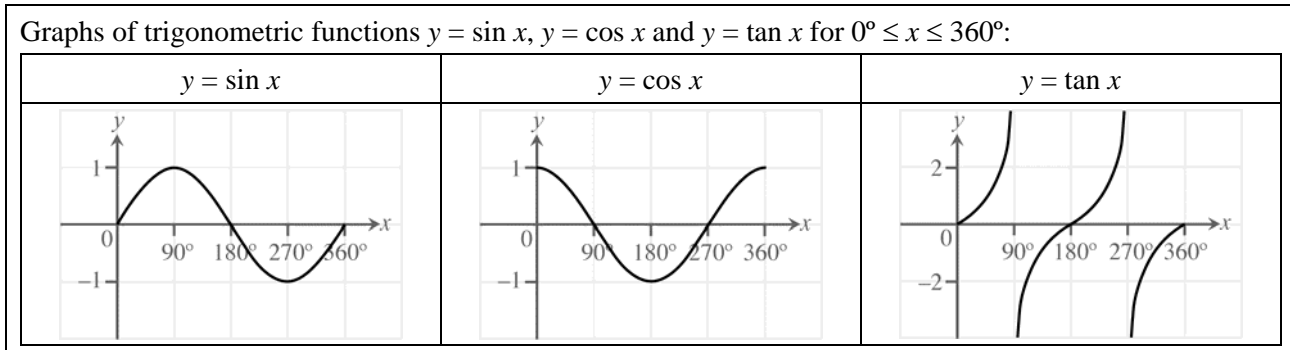


Try More

7. Find the maximum and minimum values of $(4 + 3 \sin^2 x)$ algebraically.

Lesson Worksheet 6.2(II)

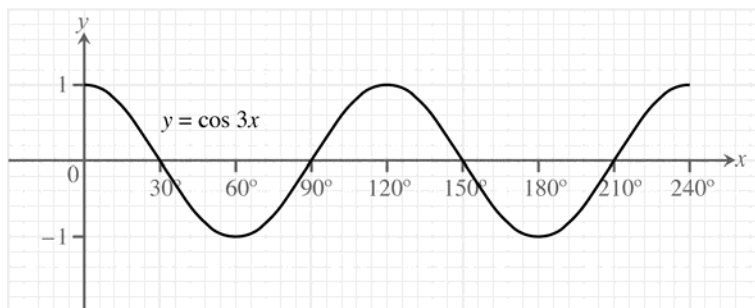
Objective: To recognize the graphs and the properties of trigonometric functions.



1. Using the above graphs, complete the following table for $0^\circ \leq x \leq 360^\circ$.

	$y = \sin x$	$y = \cos x$	$y = \tan x$
(a) Maximum value			/
(b) Minimum value			/
(c) x -intercepts			
(d) Period	360°	360°	

2. The figure shows the graph of the trigonometric function $y = \cos 3x$ for $0^\circ \leq x \leq 240^\circ$. →Exercise 6.2: 1 – 4



- (a) The maximum value of $y = \cos 3x$ is _____.
- (b) The minimum value of $y = \cos 3x$ is _____.
- (c) The period of $y = \cos 3x$ is _____.
3. Find the maximum and minimum values of $5 \sin x$ algebraically.

4. Find the maximum and minimum values of $(4 + 3 \cos x)$ algebraically.

5. Find the maximum and minimum values of $(2 \sin x - 7)$ algebraically.

6. Find the maximum and minimum values of $\cos^2 x$ algebraically.

→Exercise 6.2: 5 – 10

Try More

Find the maximum and minimum values of each of the following trigonometric functions algebraically. (7 – 8)

7. $y = 6 + \sin^2 x$

8. $y = 2 - \cos x$