

Solve the following trigonometric equation.

$$3\sin^2 x - 5\sin x - 2 = 0, \text{ for } 0 < x < 360^\circ$$

Step 1 : Factorize the quadratic equation

Step 2 : Find and form two trigonometric equation.

or

Step 3 : Solve the first equation

A: value of reference angle (alpha)	
R : range	
Q : quadrant	
A : answer	

Step 4 : Solve the second equation

A: value of reference angle (alpha)				
R : range	$0 < x < 360^\circ$			
Q : quadrant	I	II	III	IV
A : answer	(1) 180°	+	-	
	(2) 360°	+	-	
	x =			