

Calculus 12

10-6 Solving Trigonometric Equations

1. Solve for  $x$  in the interval  $[0, 2\pi]$ .

a)  $\sin x = \frac{\sqrt{3}}{2}$

b)  $\cos x = \frac{1}{2}$

2. Solve  $\sin^2 x - \sin x = 2$  for  $x$  in the interval  $[-\pi, 0]$ .

3. Solve  $6\sin^2 x - 5\cos x - 2 = 0$  for  $x$  in the interval  $[0, 2\pi]$ .

4. Solve for  $x$  in the interval  $[-\pi, \pi]$ .

a)  $\cos 2x = \cos^2 x$

b)  $\sin 2x = \cos x$