

Solve the equations for  $0 \leq x < 2\pi$

1.  $\tan \theta + \sqrt{3} = 0$

2.  $2 \cos \theta + \sqrt{3} = 0$

3.  $4 \cos^2 \theta = 1$

4.  $4 \cos^2 \theta = 3$

5.  $\tan \theta \sec \theta = \tan \theta$

6.  $2 \cos^2 \theta - 5 \cos \theta + 2 = 0$

Find the real zeros of each function using the calculator.

1.  $f(x) = 2x^2 - 5x - 3$

2.  $f(x) = -3x^2 - 17x - 10$

3.  $f(x) = 2x^3 - 13x^2 + 3x + 18$

4.  $f(x) = x^4 + 4x^3 - 2x^2 - 5x + 3$

5.  $f(x) = 3 \ln(2x - 1) + 3$

6.  $f(x) = -3e^{-x-1} + 4$