EQ-3 Trigonometric Equations (complete both for M, complete part b for P)

a) Find all solutions to the equation: $\sin \theta - 2 \sin^2 \theta = 0$

b) Find all solutions to the equation $\cos 2\theta \csc^2 \theta = 2\cos 2\theta$ on the interval $[0, 2\pi)$