For practise only. Not to be submitted.

1. For each of the following trigonometric equations, find all solutions such that $0 \leq x<2 \pi$.
(a) $\frac{\cot ^{2}(x)}{3}=1$
(b) $\sin ^{2}(x)=\frac{1}{2} \sin (x)$
(c) $\sin ^{2}(x)=\cos (x) \sin (x)$
(d) $2 \sin ^{2}(x)-\sin (x)-1=0$
(e) $\sec ^{2}(x)+\tan ^{2}(x)=7$
