

Homework Section 6.2 - Due 2nd June

1. #22 on page 278.
2. #30 on page 278.
3. #32 on page 278.
4. Given $\theta \in [0^\circ, 360^\circ)$ and $\sec^2(\theta) = 2 \tan \theta$.
Compute the possible values of θ .
Hint: Obtain a quadratic in $\tan(\theta)$ first.
5. Compute *all* values of x satisfying $\sin x \cos x = 0$.
Hence, write down *all* solutions for $\sin(2x) = 0$.
6. Given $\theta \in [0, 2\pi)$ and $(\tan \theta + 1)(\tan \theta - 1) + 2 = \frac{4}{\sin(-2\theta) \csc^2(\theta)}$.
Compute the possible values of θ .

*Optional questions.