Warm Up: Solve for $\theta$ for $0^{\circ} \leq \theta \leq 360^{\circ}$
a) $2 \cos \theta=\cos \theta-1$
b) $\sin ^{2} \theta-2 \sin \theta+1=0$

To solve trig equations you generally must only have one type of trig function in the equation. Use your trig identities to simplify the equation.

PI
QI

RI

## Example 1:

a) $\sec \theta=-2$
b) $\csc \theta=\sqrt{2}$
c) $\sin \theta \sec \theta=\sqrt{3}$
d) $6 \cos ^{2} \theta-\sin \theta-4=0$
e) $2 \sin \theta \sec \theta+\sec \theta-2 \sin \theta-1=0$

U6D9 Practice: Page 408-409 \#3bdg, 5def, 11(factor by grouping). Solve in degrees.
U6D10 Review Practice: p. $412-417 \# 15,16,17,18,19,20$ degrees only, 21 (a- period=540 ${ }^{\circ}$, b-period= $180^{\circ}$ ), 22, 24, 25ab, $26,27 \mathrm{~b}\left(\pi / 4=4^{\circ}, \pi / 2=90^{\circ}\right.$ ), $30,31,35-37$ (in degrees - teacher will provide answers for $35,36,37$ p. 418 \#4cd, $7 \mathrm{ab}, \mathrm{c}\left(\right.$ phase shift $45^{\circ}$ ), $8 \mathrm{a}, 12$ (in degrees, teacher will provide answers) (eoo), 9

A few more review questions

| Function | Domain | Range | Amplitude | Period | Phase Shift |
| :---: | :--- | :--- | :--- | :--- | :--- |
| $y=2 \sin \left(x-90^{\circ}\right)$ |  |  |  |  |  |
| $y=1 / 2 \cos \left(x+90^{\circ}\right)$ |  |  |  |  |  |
| $y=1 / 2 \sin \left(1 / 2 x-180^{\circ}\right)-2$ |  |  |  |  |  |
| $y=2 \cos ^{1} 12\left(x-180^{\circ}\right)+1$ |  |  |  |  |  |

