C12 - 6.4 - Proofs Conjugate HW

$$\frac{sinx}{1+cosx} \quad \bigg| \quad \frac{1-cosx}{sinx}$$

$$\frac{cosx}{1-sinx} \quad \bigg| \quad \frac{1+sinx}{cosx}$$

$$\frac{sinx}{1-cosx} \quad \bigg| \quad \frac{1+cosx}{sinx}$$

$$\frac{cosx}{1+sinx} \quad \bigg| \quad \frac{1-sinx}{cosx}$$

$$secx + tanx \quad \bigg| \quad \frac{cosx}{1-sinx}$$

C12 - 6.4 - FOIL Factor WS (See 4.5 Notes)

Distribute/Foil

$sinx(1 - sinx)$

$cosx(sinx + 1)$

$(1 + cosx)(1 - cosx)$

$(sinx - cosx)^2$

$(sinx + 2)(sinx - 1)$

$(cosx + 1)(cosx - 3)$

Factor

$\sin x - \sin^2 x$

$sinxcosx + cosx$

$cosx + \cos^2 x$

$1 - \sin^2 x$

$1 + \sin^2 x$

$\sin^3 x - sinx$

$\cos^2 x + cosx - 2$

$\cos^3 x + \cos^2 x - 2cosx$

$\cos^4 x - \cos^2 x - 2$

$2\sin^2 x + sinx - 1$

$cscx^2 - 2cscx - 3$

$2sinx - \dfrac{1}{sinx} + 1$

C12 - 6.4 - Proofs FOIL Factor Pythag WS (See 4.5 Notes)

Prove the left hand side equals the right hand side

$(sinx - 2)(sinx + 1)$ | $sin^2 x - sinx - 2$

$(1 + sinx)(1 - sinx)$ | $cos^2 x$

$(1 + cosx)(1 - cosx)$ | $sin^2 x$

$(2cosx - 1)(cosx + 2)$ | $2 cos^2 x + 3cosx - 2$

Make up two!