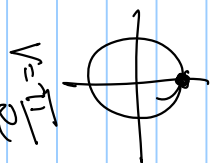
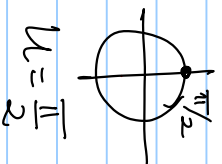


$$u - v$$

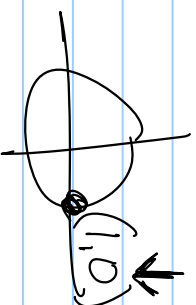
$$49. \sin [\sin^{-1} 1 - \cos^{-1} 0]$$

$$\sin u = 1 \quad \cos v = 0$$



$$\sin [\pi/2 - \pi/2]$$

$$\sin 0 = 0$$



$$\sin(u - v)$$

$$45. \sin(\arctan x - \arccos x) =$$

$$\tan u = x \quad \cos v = x \quad \text{CAH}$$

$$\text{TOA} \quad \frac{\sqrt{4x^2+1}}{1} \quad \frac{1}{x} \quad \frac{1}{\sqrt{1-x^2}}$$

$$\sin(u - v) = \sin u \cos v - \cos u \sin v$$

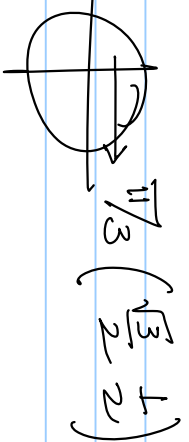
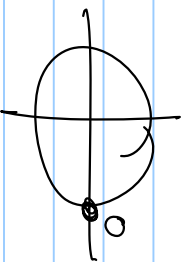
$$\left(\frac{2x}{\sqrt{4x^2+1}}\right)\left(\frac{x}{1}\right) - \left(\frac{1}{\sqrt{4x^2+1}}\right)\left(\frac{\sqrt{1-x^2}}{1}\right)$$

$$\frac{2x^2 - \sqrt{1-x^2}}{\sqrt{4x^2+1}}$$

53. $\tan(\sin^{-1} u + \sin^{-1} \frac{1}{2})$

$\tan(u + v)$

$\sin u = 0 \quad \sin v = \frac{1}{2}$



homework

5.5 (for modular)

(All for modular)
(All for modular)

$\tan(0 + \pi/3)$

$\tan(\pi/3) = \frac{1/2}{\sqrt{3}/2} = \frac{1}{2} \cdot \frac{2}{\sqrt{3}} = \frac{\sqrt{3}}{3}$

1-85 odd