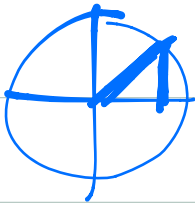


## 7.3 NOTES -- D1

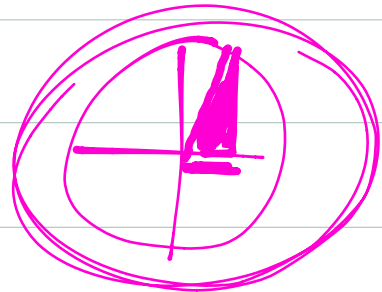
Find Exact Value.

①  $(\sin 45^\circ)(\cos 60^\circ)$

$$\frac{\sqrt{2}}{2} \cdot \frac{1}{2}$$

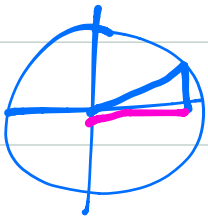


$$\frac{\sqrt{2}}{4}$$

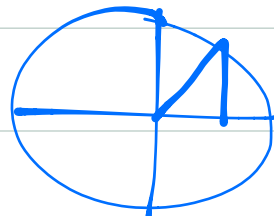


②  $(\cos 30^\circ)(\sin 45^\circ)$

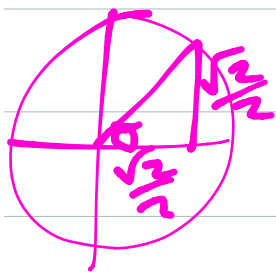
$$\frac{\sqrt{3}}{2} \cdot \frac{\sqrt{2}}{2}$$



$$\frac{\sqrt{6}}{4}$$



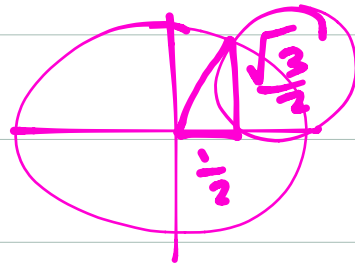
$$\textcircled{3} \left( \tan \frac{\pi}{4} \right) - \left( \sin \frac{\pi}{3} \right)$$



$$\frac{1}{2} - \frac{\sqrt{3}}{2}$$

$$\frac{\frac{1}{2}}{\frac{\sqrt{2}}{2}} - \frac{\sqrt{3}}{\frac{\sqrt{2}}{2}}$$

$$\frac{2 - \sqrt{3}}{2}$$



$$\textcircled{4} \quad 6(\tan 45^\circ) - 8(\cos 60^\circ)$$

$$6(1) - 8\left(\frac{1}{2}\right)$$

$$6 - 4$$

$$2$$

4 decimal places.

$$\textcircled{5} \quad \cos 48^\circ = .6691$$

$$\textcircled{6} \quad \csc \frac{\pi}{12} \text{ rad} =$$

$$\frac{1}{\sin\left(\frac{\pi}{12}\right)} = 3.8637$$

$$\textcircled{7} \sin^2\left(\frac{\pi}{6}\right) + \cos^2\left(\frac{\pi}{3}\right)$$

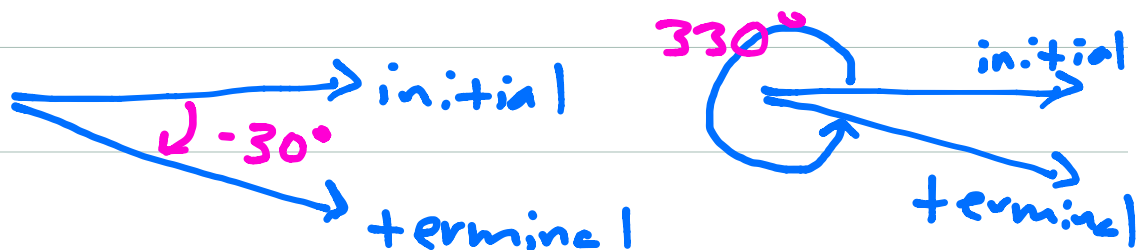
Rewrite:  $\left(\sin \frac{\pi}{6}\right)^2 + \left(\cos \frac{\pi}{3}\right)^2$   
 $\left(\frac{1}{2}\right)^2 + \left(\frac{1}{2}\right)^2$   
 $\frac{1}{4} + \frac{1}{4}$

$$\frac{2}{4} \rightarrow \frac{1}{2}$$

## 7.4 NOTES PART I

Coterminal Angle - 2  $\Delta$ 's  
w/ the same terminal side.

△ ex  $-30^\circ$  and  $330^\circ$



$$\theta = -30^\circ, 330^\circ, 690^\circ, 1050^\circ$$

$+360^\circ \quad +360^\circ \quad +360^\circ$

⊙ ex  $\cos(-300^\circ) = \cos(60^\circ) = \left(\frac{1}{2}\right)$

$+360$

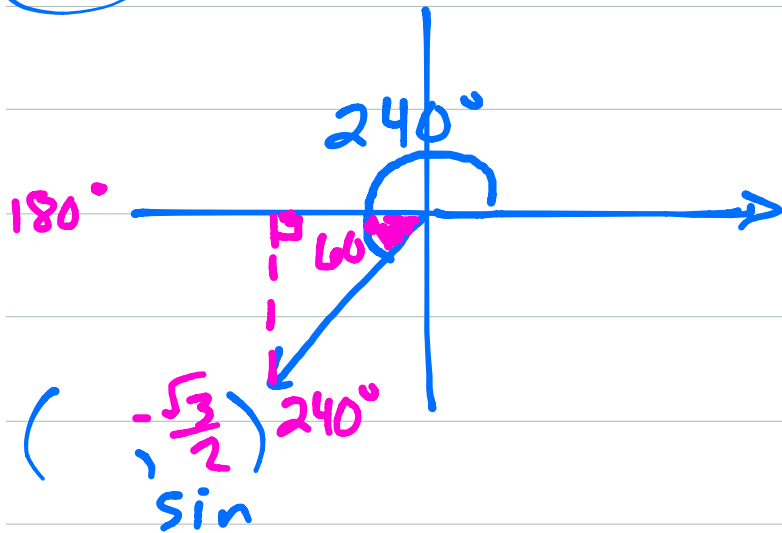
Coterminal

⊙ ex  $\sin 390^\circ = \sin(30^\circ) = \left(\frac{1}{2}\right)$

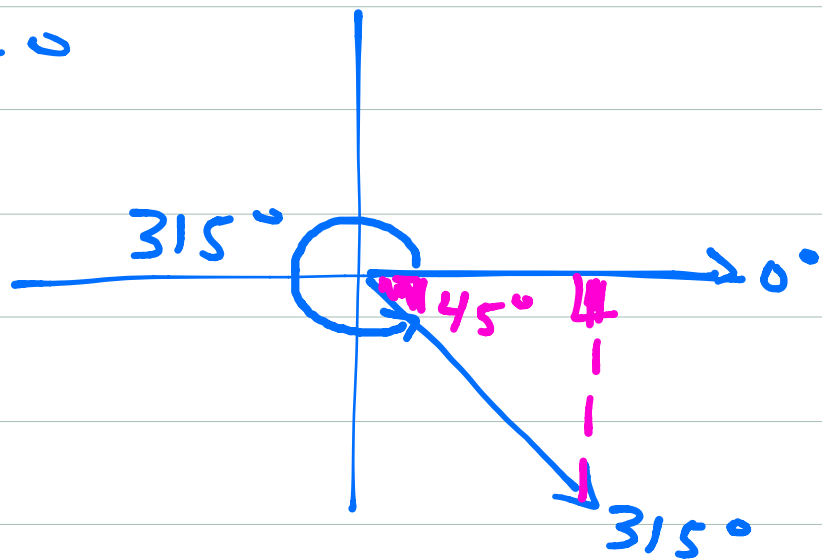
## Reference Angle:

Acute  $\angle$   $0^\circ < x < 90^\circ$  formed w/  
terminal side and X-axis.

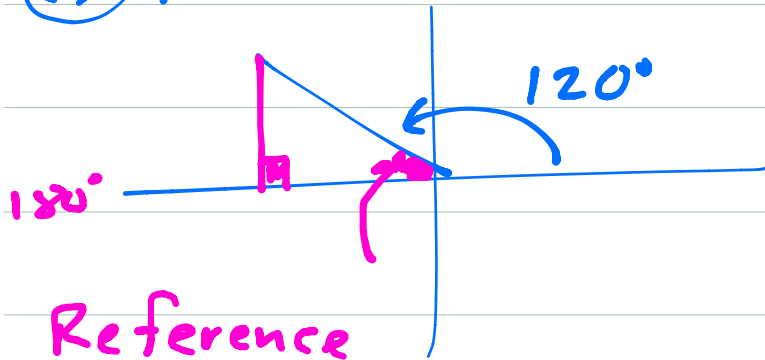
(ex)  $240^\circ$        $\sin 240^\circ = -\frac{\sqrt{3}}{2}$



(ex)  $315^\circ$



ex  $120^\circ$



Reference  
Angle =  $60^\circ$