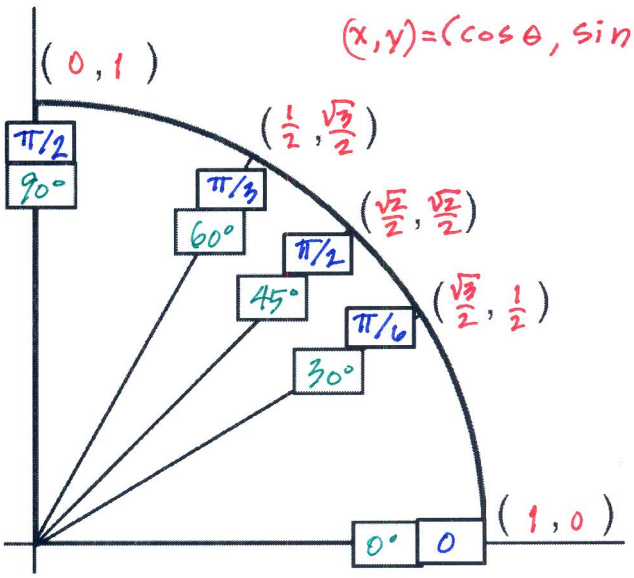
PreCalculus
Trig Values in Quadrant I WS

Name Thaston

I. Complete quadrant I of the unit circle ...
... using NO notes, resources, or calculator!!

- label degrees
- label radians
- label ordered pairs



II. Find each exact trig value. No Calculator!!

1. $\sin 30° = \frac{1}{2}$
2. $\cos 45° = \frac{\sqrt{2}}{2}$
3. $\tan\frac{\pi}{3} = \sqrt{3}$ $\quad \frac{\sqrt{3}}{2} \cdot \frac{2}{1}$
4. $\cos\frac{\pi}{6} = \frac{\sqrt{3}}{2}$
5. $\sin 60° = \frac{\sqrt{3}}{2}$
6. $\tan\frac{\pi}{6} = \frac{\sqrt{3}}{3}$ $\quad \frac{1}{2} \cdot \frac{2}{\sqrt{3}} = \frac{1}{\sqrt{3}}$
7. $\cot\frac{\pi}{4} = 1$ $\quad \frac{\sqrt{2}}{2} \cdot \frac{2}{\sqrt{2}}$
8. $\sec 30° = \frac{2\sqrt{3}}{3}$ $\quad \frac{1}{\frac{\sqrt{3}}{2}} = 1 \cdot \frac{2}{\sqrt{3}}$
9. $\tan\frac{\pi}{2} =$ und $\quad \frac{1}{0}$
10. $\sin 90° = 1$
11. $\csc 60° = \frac{2\sqrt{3}}{3}$ $\quad \frac{1}{\frac{\sqrt{3}}{2}} = 1 \cdot \frac{2}{\sqrt{3}}$
12. $\sec\frac{\pi}{4} = \sqrt{2}$ $\quad \frac{1}{\frac{\sqrt{2}}{2}} = 1 \cdot \frac{2}{\sqrt{2}} \cdot \frac{\sqrt{2}}{\sqrt{2}} = \frac{2\sqrt{2}}{2}$

III. Evaluate. No calculator!!

$\frac{\sqrt{2}/2}{\sqrt{2}/2} = 1$

13. $\sin 30° - \cos\frac{\pi}{3}$ $\quad = \frac{1}{2} - \frac{1}{2} = 0$
14. $\sin\frac{\pi}{4}\cos\frac{\pi}{4}$ $\quad = \frac{\sqrt{2}}{2} \cdot \frac{\sqrt{2}}{2} = \frac{2}{4} = \frac{1}{2}$
15. $\tan 45° + \cos 0°$ $\quad = 1 + 1 = 2$