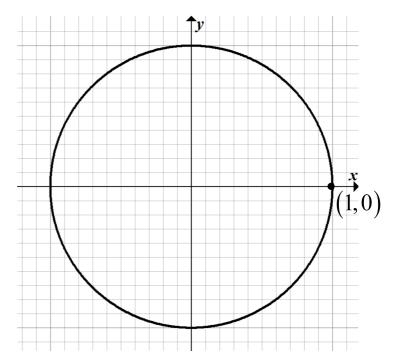
Pre 4.2 building unit circle

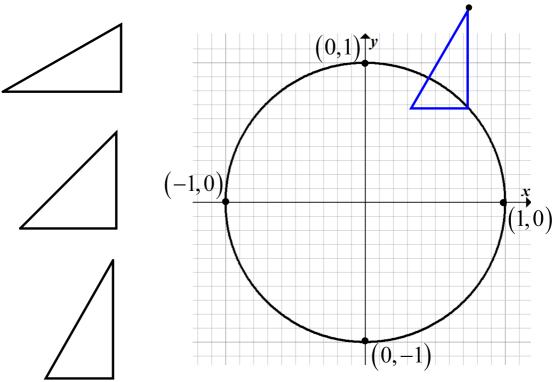


Equation of the Circle:

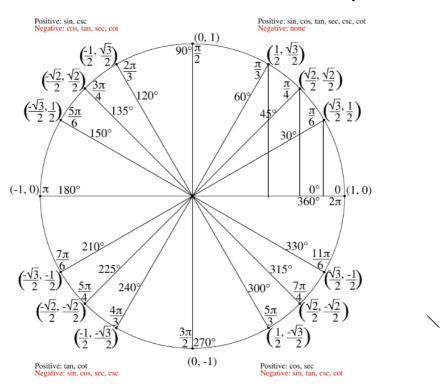
What are the other intercepts? Label those points.



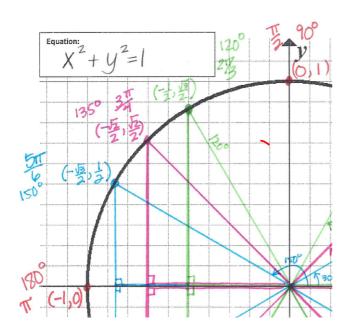
Equation of the circle:



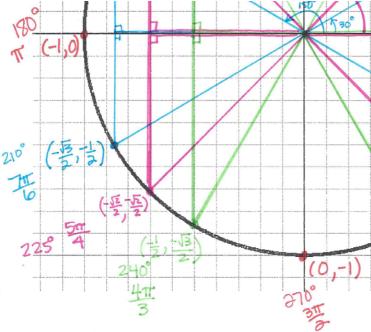
Let's use our unit circle to answer some questions...



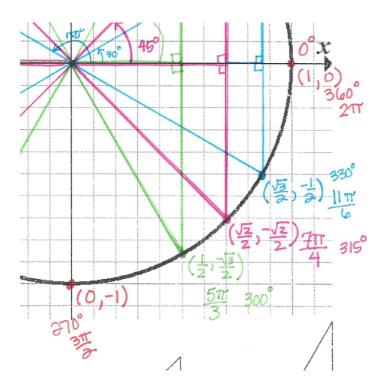
1. What is the exact value of $\sin 135^{\circ}$?



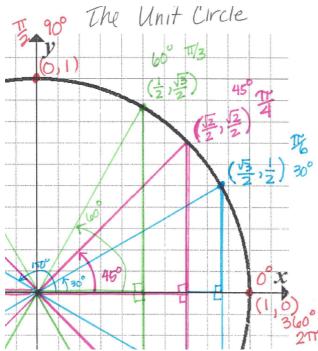
2. What is the exact value of $\cos \frac{4\pi}{3}$?



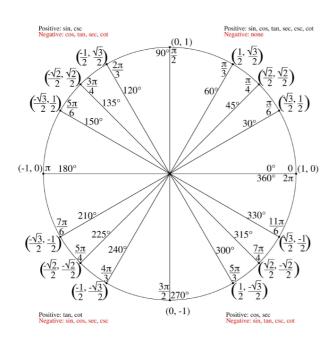
3. What is the exact value of $\tan 330^{\circ}$?



4. What is the exact value of $\sin \frac{\pi}{6}$?



5. What is the exact value of $cos(-135^{\circ})$?



- 6. What is the exact value of $sin \frac{7\pi}{6}$?
- 7. What is the exact value of $tan 270^{\circ}$?
- 8. In what quadrants is the tangent positive?
- 9. In what quadrants is the cosine negative?

What are some conclusions we can draw from the Unit Circle?

If you want a trick to help memorize the coordiantes watch this youtube video.

https://www.youtube.com/watch?v=LE6dmczMc68

Precalc Pre 4.2 building unit circle