

Unit 9 Day 5

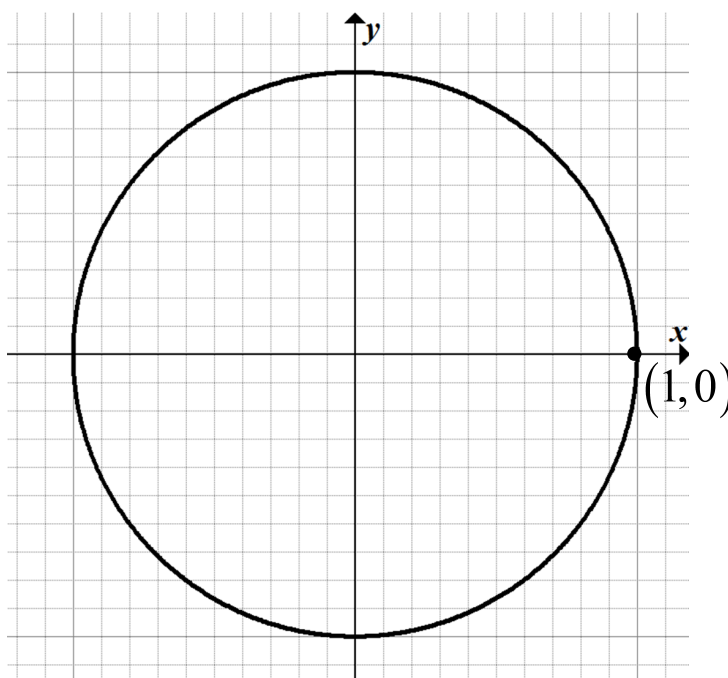


CONSTRUCTING *The Unit Circle*

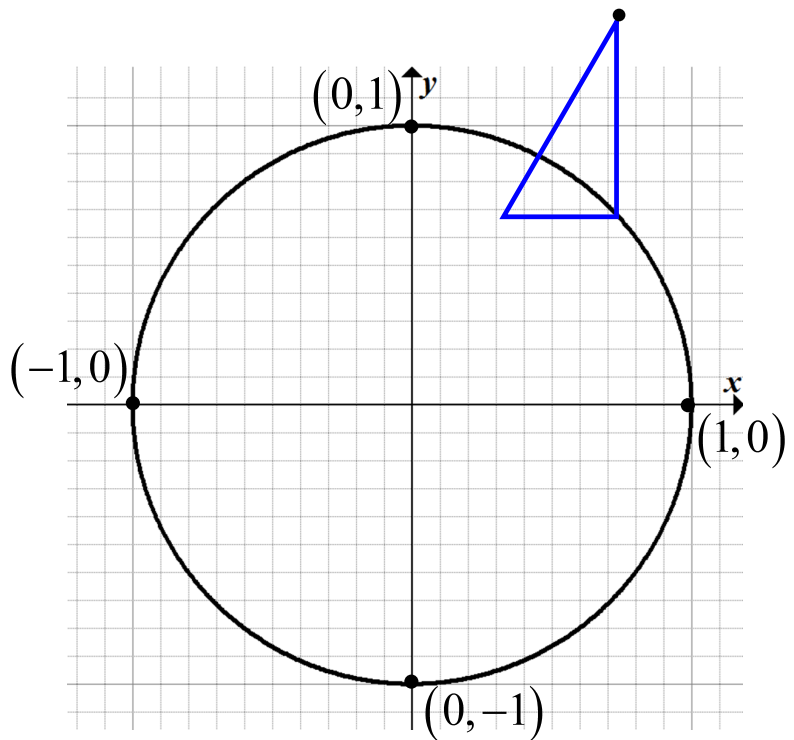
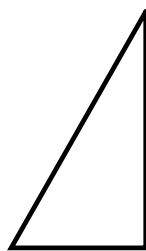
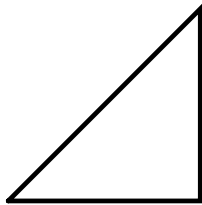
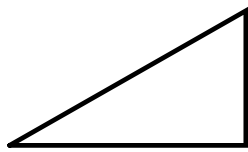


Equation of the Circle:

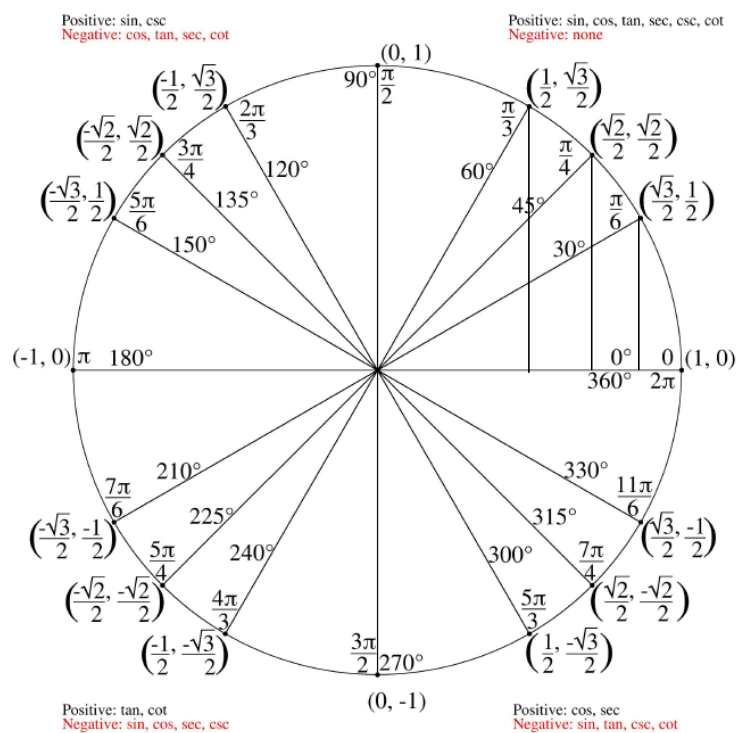
What are the other intercepts?
Label those points.



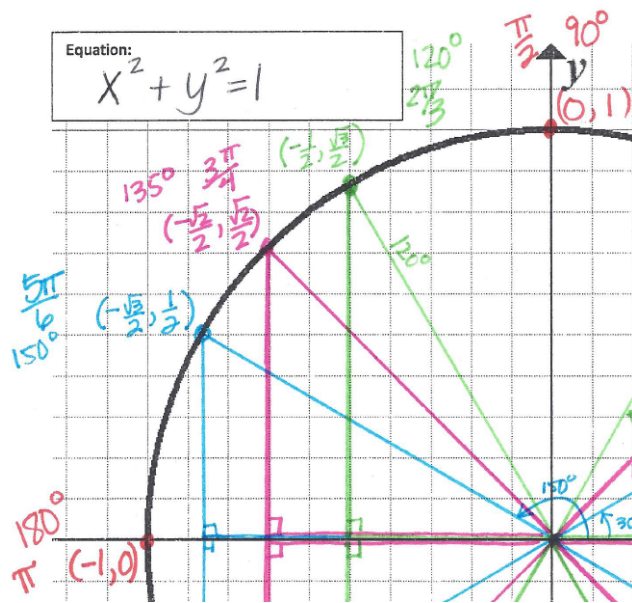
Equation of the circle: _____



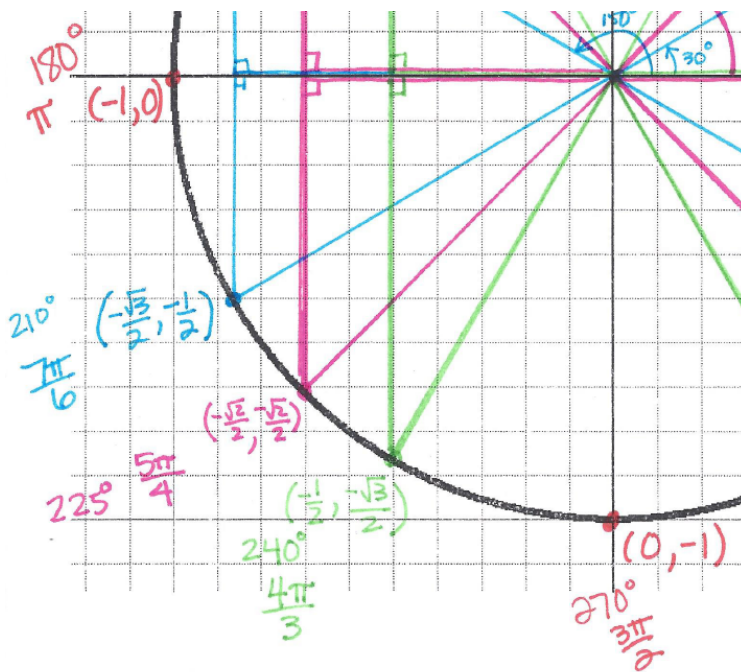
Let's use our unit circle to answer some questions...



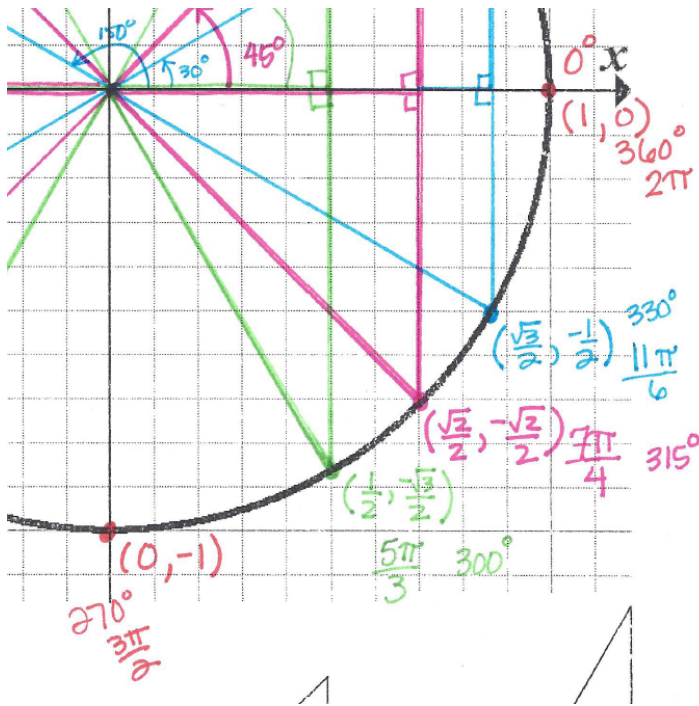
1. What is the exact value of $\sin 135^\circ$?



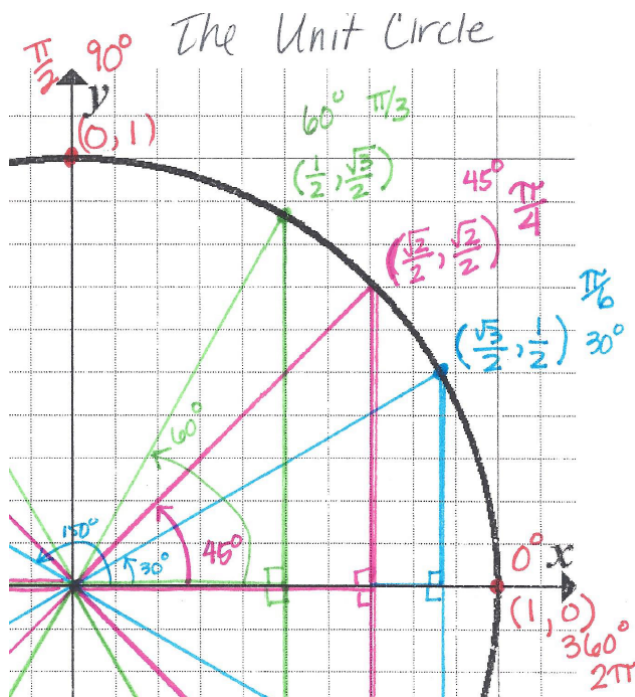
2. What is the exact value of $\cos \frac{4\pi}{3}$?



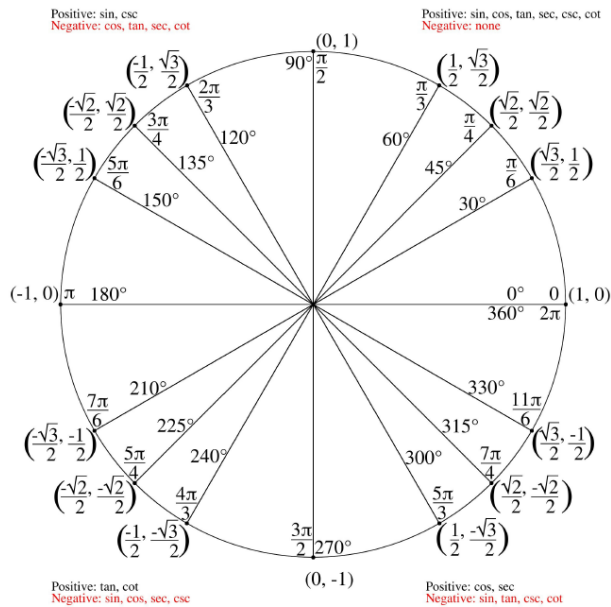
3. What is the exact value of $\tan 330^\circ$?



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 coordinates watch this youtube video.

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

