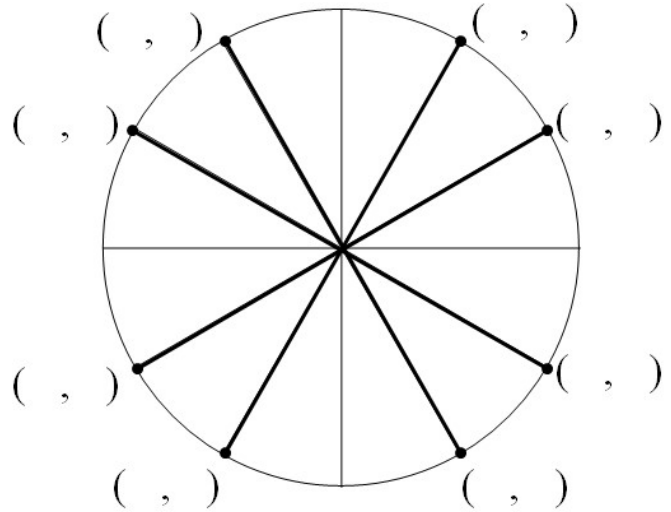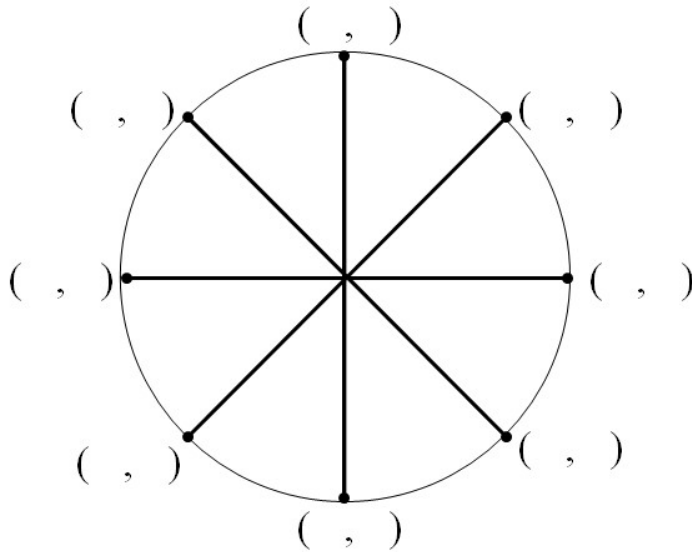Trig information sheet→ **HELPFUL STUDY TOOL FOR FINAL EXAM!**

Quiz yourself: complete as much as possible without looking at your notes!

Label each set of given coordinates <u>and</u> write the corresponding radian value.

(,)
(,)   (,)
(,)   (,)
(,)   (,)
(,)

(,)   (,)
(,)   (,)
(,)   (,)
(,)   (,)

$$\sin\theta = \frac{y}{r} \qquad \cos\theta = \underline{\quad} \qquad \tan\theta = \underline{\quad}$$

$$\csc\theta = \frac{r}{y} \qquad \sec\theta = \underline{\quad} \qquad \cot\theta = \underline{\quad}$$

<u>Principal Values are used to find unique solutions:</u>

Sin$x$ and Tan$x$, refer only to Quadrant ____ or ____.

Cos$x$, refer only to Quadrant ____ or ____.

Name the function that best completes each identity statement:

Reciprocal identities:

1. $\underline{\quad} = \dfrac{1}{\sec\theta}$

2. $\underline{\quad} = \dfrac{1}{\sin\theta}$

3. $\underline{\quad} = \dfrac{1}{\cot\theta}$

4. $\underline{\quad} = \dfrac{1}{\csc\theta}$

5. $\underline{\quad} = \dfrac{1}{\tan\theta}$

6. $\underline{\quad} = \dfrac{1}{\cos\theta}$

Quotient Identities:

7. $\underline{\quad} = \dfrac{\cos\theta}{\sin\theta}$

8. $\underline{\quad} = \dfrac{\sin\theta}{\cos\theta}$

Double Angle Identities:

9. $\sin(2\theta) = \underline{\qquad\qquad}$

10. $\cos(2\theta) = \cos^2\theta - \underline{\qquad}$

Pythagorean identities:

11. $\underline{\qquad} + \underline{\qquad} = 1$

12. $\tan^2\theta + 1 = \underline{\qquad}$

13. $1 + \cot^2\theta = \underline{\qquad}$

14. <u>Clearly</u> show how to derive the Pythagorean identities in #12 and #13 from the identity given in #11.
     HINT: use division