

Name:

MATH 105 - SEC 001, FALL 2010. QUIZ 8
TIME LIMIT: 10 MINUTES

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Good luck!

Problem 1.

- a) Explain in your own words the definition of $\sin(\theta)$ on the unit circle (θ in degrees).

$\sin(\theta)$ is the vertical coordinate of the point on the unit circle at angle θ , where θ is measured from the positive x -axis in a counter-clockwise direction.

- b) Explain in your own words the definition of $\cos(\theta)$ on the unit circle (θ in degrees).

$\cos(\theta)$ is the horizontal coordinate of the point on the unit circle at angle θ , where θ is measured from the positive x -axis in a counter-clockwise direction.

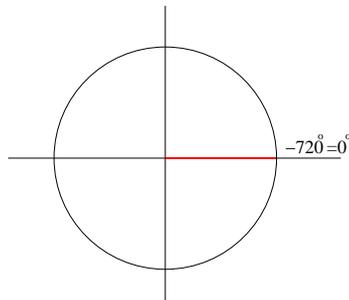
Problem 2

Mark the following angles on a unit circle and give the coordinates of the point determined by each angle.

- a) -720°

$$x = \cos(-720^\circ) = \cos(0^\circ) = 1$$

$$y = \sin(-720^\circ) = \sin(0^\circ) = 0$$



- b) 1000°

$$x = \cos(1000^\circ) = \cos(280^\circ) \approx 0.1737$$

$$y = \sin(1000^\circ) = \sin(280^\circ) \approx -0.9848$$

