

MTH 138 Practice Quiz #9

- (1) Convert  $40^\circ$  to radians.
- (2) If the radius of circle is 3, find the arc length on this circle subtended by a central angle of 2 radians.
- (3) If the radius of circle is 3, find the area of circular sector in this circle subtended by a central angle of 2 radians.
- (4)  $\sin(45^\circ) = ?$   $\cos(60^\circ) = ?$   $\tan(45^\circ) = ?$   $\sec(30^\circ) = ?$
- (5) Which trigonometric functions are positive in the third quadrant?
- (6) If  $\sin x = \frac{1}{3}$  and  $\cos x < 0$ , find the values of other five trigonometric functions (other than  $\sin x$ ).
- (7) If  $\cos t = 0.1$ ,  $\cos(-t) = ?$
- (8) Sketch the graphs of all six trigonometric functions.
- (9) As  $x \rightarrow \frac{\pi^+}{2}$ ,  $\tan x \rightarrow ?$