

Name: _____

Score: _____ /15

Worksheet 15 (Due Fri, May 23)

Math 1060Q – Summer 2014

Professor Hohn

Three questions will be chosen randomly to be graded. You must show all of your work to receive full credit!

1. Find all solutions in the interval $[0, 2\pi)$ to the following equations.

(a) $\sin t = \frac{-\sqrt{3}}{2}$

(b) $\cos t = \frac{1}{2}$

(c) $\tan t = -\sqrt{3}$

(d) $\sec t = -2$

2. Find *all* solutions to the following equations.

(a) $\cos t = \frac{-\sqrt{3}}{2}$

(b) $\csc t = 2$

(c) $\cot t = -1$

(d) $\sin t = -1$

3. Find all solutions in the interval $[0, 2\pi)$ to the following equations.

(a) $\sqrt{2} \cos t = -1$

(b) $\frac{3 + 2 \sin t}{5} = \sin t$

$$(c) \ 1 = \frac{1 + 3 \cos t}{5 \cos t + 2}$$

$$(d) \ \frac{6 \sec t + 2}{2 \sec t - 1} = 2$$