Math 1330
Homework 21 (5.1b, 4.4)

The homework problems come from the exercises in Chapter 4 and 5 of the online text. Problem 5.1.26 refers to problem 26 in Chapter 5, Section 1. Record your answers to these problems in the EMCF titled "**Homework 21**."

Problems 1 – 6 are matching. Work each problem, then select the correct answer from the answer choices listed to the right of the problems. Note: Answer choices A – F may be correct more than once or not at all.

1.	Problem 5.1.26	A.	$\sec t$
2.	Problem 5.1.28	B.	1
3.	Problem 5.1.30	C.	$-\sec t$
4.	Problem 5.1.34	D.	$-\csc t$
5.	Problem 5.1.36	E.	$\csc t$
6.	Problem 5.1.38	F.	$\tan t$

7. Problem 4.4.8

A. $\tan\theta = -\dfrac{\sqrt{21}}{2}$ $\qquad \cos\theta = \dfrac{2}{5}$

B. $\tan\theta = \dfrac{2\sqrt{21}}{21}$ $\qquad \cos\theta = \dfrac{-\sqrt{21}}{5}$

C. $\tan\theta = \dfrac{\sqrt{21}}{2}$ $\qquad \cos\theta = \dfrac{-2}{5}$

D. $\tan\theta = \dfrac{\sqrt{21}}{2}$ $\qquad \cos\theta = \dfrac{-\sqrt{21}}{5}$

E. None of the above

8. Problem 4.4.10

A. $\sec\theta = \dfrac{\sqrt{10}}{3}$, $\qquad \cot\theta = 3$

B. $\sec\theta = -\dfrac{\sqrt{10}}{3}$, $\qquad \cot\theta = 3$

C. $\sec\theta = 3\sqrt{10}$, $\qquad \cot\theta = 3$

D. $\sec\theta = -3\sqrt{10}$, $\qquad \cot\theta = 3$

E. $\sec\theta = -\dfrac{\sqrt{10}}{3}$, $\qquad \cot\theta = -3$

F. None of the above.

9.   Problem 4.4.12 Find $\cos\theta$ and $\sin\theta$.

A. $\sin\theta = \dfrac{-5}{13}$, $\cos\theta = \dfrac{12}{13}$

B. $\sin\theta = \dfrac{12}{13}$, $\cos\theta = \dfrac{-5}{13}$

C. $\sin\theta = \dfrac{-5}{13}$, $\cos\theta = \dfrac{-12}{13}$

D. $\sin\theta = \dfrac{5}{13}$, $\cos\theta = \dfrac{-12}{13}$

E. $\sin\theta = \dfrac{5}{13}$, $\cos\theta = \dfrac{12}{13}$

F.   None of the above.

Problems 10 – 15 are matching problems. Work the problems listed below. Select the correct answer from the list given below the problem list. Note, all variables have been changed to x. Note also, it is possible for an answer listed below to be correct more than once or not at all.

10.   Problem 4.4.28
11.   Problem 4.4.30
12.   Problem 4.4.32
13.   Problem 4.4.34
14.   Problem 4.4.36
15.   Problem 4.4.38

A. $-\sin^2 x$ I. $-\tan x$

B. -1 J. $\cot x$

C. $-\cot^2 x$ K. $\sin^2 x$

D. $\cot^2 x$ L. $\tan x$

E. $\csc x$ M. $2\csc x$

F. $2\sec x$ N. 1

G. $\cos x$ O.   The correct answer is not listed.

H. $\sec x$