Math 1330
Homework 14 (4.3)

Problem 4.3.10 refers to problem 10 in Chapter 4, Section 3 in the online text. Record your answers to all the problems in the EMCF titled "**Homework 14**."

1.   Problem 4.3.10 b

  A. $-470°,\ 250°,\ 600°$ B. $-110°,\ 250°,\ 600°$

  C. $-110°,\ 230°,\ 600°$ D. $-470°,\ \ \ 230°,\ 610°$

  E. $-1190°,\ 250°,\ 610°$

2.   Problem 4.3.12 a

  A. $-\dfrac{4\pi}{3},\ \dfrac{2\pi}{3},\ \dfrac{14\pi}{3}$ B. $-\dfrac{4\pi}{3},\ \dfrac{2\pi}{3},\ \dfrac{13\pi}{3}$

  C. $-\dfrac{10\pi}{3},\ \dfrac{2\pi}{3},\ \dfrac{13\pi}{3}$ D. $-\dfrac{4\pi}{3},\ 2\pi,\ \dfrac{14\pi}{3}$

  E. $-\dfrac{5\pi}{3},\ \dfrac{2\pi}{3},\ \dfrac{20\pi}{3}$

3.   Problem 4.3.18: Give the reference angle for each.

  A. $45°,\ \ \ 30°,\ \ \ 30°$ B. $45°,\ \ \ 30°,\ \ \ -60°$

  C. $45°,\ \ \ 60°,\ \ \ 30°$ D. $-45°,\ \ 30°,\ \ \ 60°$

  E. $45°,\ \ \ 30°,\ \ \ 60°$

4.   Problem 4.3.20: Give the reference angle for each.

  A. $\dfrac{\pi}{4},\ \ \dfrac{\pi}{6},\ \ \dfrac{\pi}{3}$ B. $\dfrac{\pi}{3},\ \ \dfrac{\pi}{4},\ \ \dfrac{\pi}{6}$

  C. $-\dfrac{\pi}{3},\ \ \dfrac{\pi}{4},\ \ -\dfrac{\pi}{6}$ D. $\dfrac{\pi}{6},\ \ \dfrac{\pi}{4},\ \ \dfrac{\pi}{3}$

  E. $\dfrac{\pi}{3},\ \ -\dfrac{\pi}{4},\ \ \dfrac{\pi}{6}$

5.   Problem 4.3.22: Give the reference angle for each.

A. $\dfrac{8\pi}{3}$, $-420°$, $\dfrac{\pi}{4}$

B. $\dfrac{\pi}{3}$, $60°$, $\dfrac{\pi}{4}$

C. $\dfrac{\pi}{3}$, $-60°$, $-\dfrac{\pi}{4}$

D. $\dfrac{8\pi}{3}$, $60°$, $\dfrac{\pi}{4}$

E. $\dfrac{\pi}{3}$, $-60°$, $\dfrac{\pi}{4}$

6.   Problem 4.3.32

A.   I   B.   II   C.   III   D.   IV

7.   Problem 4.3.44: Find $\tan\theta$.

A. $\dfrac{7}{25}$ B. $\dfrac{7}{24}$ C. $\dfrac{24}{7}$ D. $\dfrac{-24}{7}$ E. $\dfrac{24}{25}$

8.   Problem 4.3.46: Find $\sin\theta$ and $\cos\theta$.

A. $\sin\theta = \dfrac{2}{7}$; $\cos\theta = \dfrac{3\sqrt{5}}{7}$

B. $\sin\theta = \dfrac{-2}{7}$; $\cos\theta = \dfrac{-3\sqrt{5}}{7}$

C. $\sin\theta = \dfrac{2}{7}$; $\cos\theta = \dfrac{-3\sqrt{5}}{7}$

D. $\sin\theta = \dfrac{-2}{7}$; $\cos\theta = \dfrac{3\sqrt{5}}{7}$

E. $\sin\theta = \dfrac{2}{7}$; $\cos\theta = \dfrac{-5}{7}$

9.   Problem 4.3.50: Give the cosine and the cosecant.

A.   0,   1

B.   0,   −1

C.   undefined, −1

D.   0,   undefined

E.   −1,   0

10. Problem 4.3.52: Give the tangent and the secant.

    A.   0,   1   B.   1,   undefined

    C.   undefined,   1   D.   undefined,   0

    E.   0,   0

11. Problem 4.3.56

    A. $\csc(10°)$, $-\cos\left(\dfrac{\pi}{6}\right)$ B. $-\csc(10°)$, $-\cos\left(\dfrac{\pi}{6}\right)$

    C. $\csc(10°)$, $\cos\left(\dfrac{\pi}{6}\right)$ D. $-\csc(10°)$, $\cos\left(\dfrac{\pi}{6}\right)$

12. Problem 4.3.58

    A. $-\tan(20°)$, $\sec\left(\dfrac{\pi}{4}\right)$ B. $\tan(20°)$, $-\sec\left(\dfrac{\pi}{4}\right)$

    C. $-\tan(20°)$, $-\sec\left(\dfrac{\pi}{4}\right)$ D. $\tan(20°)$, $\sec\left(\dfrac{\pi}{4}\right)$

13. Problem 4.3.68

    A. $\dfrac{-\sqrt{3}}{2}$, $\dfrac{\sqrt{2}}{2}$ B. $-\dfrac{1}{2}$, $\dfrac{\sqrt{2}}{2}$

    C. $-\dfrac{1}{2}$, $\sqrt{2}$ D. $\dfrac{\sqrt{3}}{2}$, $\sqrt{2}$

    E. $\dfrac{\sqrt{3}}{2}$, $-\sqrt{2}$

14. Problem 4.3.70

    A. $\dfrac{\sqrt{3}}{2}$, $\sqrt{3}$ B. $-\dfrac{\sqrt{3}}{2}$, $-\sqrt{3}$

    C. $\dfrac{\sqrt{3}}{2}$, $-\dfrac{\sqrt{3}}{3}$ D. $\dfrac{\sqrt{3}}{2}$, $\dfrac{\sqrt{3}}{3}$

    E. $\dfrac{\sqrt{3}}{2}$, $-\sqrt{3}$

15.   Problem 4.3.72

A.   1,   −2   B.   −1, $\dfrac{2\sqrt{3}}{3}$

C.   0, $\dfrac{2\sqrt{3}}{3}$ D.   −1, $\dfrac{-2\sqrt{3}}{3}$

E.   −1, $\dfrac{-\sqrt{3}}{2}$