Math 1330
Homework 24 (6.2)

Problem 6.2.2 refers to problem 2 in Chapter 6, Section 2. Record your answers to all the problems in the EMCF titled "**Homework 24**."

1. Problem 6.2.2 c

   A. yes   B. no

2. Problem 6.2.10 a and b

   A. $sin(2\alpha) = \frac{-6}{5}$ $cos(2\alpha) = \frac{-8}{5}$

   B. $sin(2\alpha) = \frac{-24}{25}$ $cos(2\alpha) = \frac{-7}{25}$

   C. $sin(2\alpha) = \frac{-24}{25}$ $cos(2\alpha) = \frac{7}{25}$

   D. $sin(2\alpha) = \frac{24}{25}$ $cos(2\alpha) = \frac{1}{7}$

   E. $sin(2\alpha) = \frac{24}{25}$ $cos(2\alpha) = \frac{7}{25}$

3. Problem 6.2.12 a and b

   A. $sin(2\alpha) = \frac{-3}{5}$ $cos(2\alpha) = \frac{-4}{5}$

   B. $sin(2\alpha) = \frac{3}{5}$ $cos(2\alpha) = \frac{4}{5}$

   C. $sin(2\alpha) = \frac{-3\sqrt{10}}{5}$ $cos(2\alpha) = \frac{2\sqrt{10}}{5}$

   D, $sin(2\alpha) = \frac{-3}{5}$ $cos(2\alpha) = \frac{4}{5}$

   E. $sin(2\alpha) = \frac{-3\sqrt{10}}{5}$ $cos(2\alpha) = \frac{\sqrt{10}}{5}$

4. Problem 6.2.14

   A. $sin\beta$ B. $cos\beta$

   C. $cos\left(\frac{\beta}{2}\right)$ D. $sin\left(\frac{\beta}{2}\right)$

   E. None of the above

5. Problem 6.2.16

    A. $\dfrac{\sqrt{2}}{4}$

    B. $\dfrac{\sqrt{3}}{2}$

    C. $\dfrac{-1}{2}$

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

    E. None of the above

6. Problem 6.2.20

    A. $sin\,46°$

    B. $cos\,46°$

    C. $cos\,11.5°$

    D. $sin\,11.5°$

    E. None of the above

7. Problem 6.2.30

    A. Quadrant 1, negative; Quadrant 1, positive

    B. Quadrant 1, positive; Quadrant 2, negative

    C. Quadrant 2, negative; Quadrant 2, negative

    D. Quadrant 2, positive; Quadrant 1, positive

    E. None of the above

8. Problem 6.2.32

    A. Quadrant 3, negative; Quadrant 4, positive

    B. Quadrant 3, negative; Quadrant 3, negative

    C. Quadrant 2, positive; Quadrant 3, negative

    D. Quadrant 2, positive; Quadrant 4, positive

    E. None of the above

9.   Problem 6.2.42a

  A. $\dfrac{\sqrt{2-\sqrt{2}}}{2}$

  B. $-\dfrac{\sqrt{2+\sqrt{2}}}{2}$

  C. $\dfrac{\sqrt{2+\sqrt{2}}}{2}$

  D. $-\dfrac{\sqrt{2-\sqrt{2}}}{2}$

  E.   None of the above

10.   Problem 6.2.42 b

  A. $\dfrac{\sqrt{2+\sqrt{2}}}{2}$

  B. $-\dfrac{\sqrt{2+\sqrt{2}}}{2}$

  C. $-\dfrac{\sqrt{2-\sqrt{2}}}{2}$

  D. $\dfrac{\sqrt{2-\sqrt{2}}}{2}$

  E.   None of the above

11.   Problem 6.2.46 a

  A. $-\dfrac{\sqrt{2+\sqrt{3}}}{2}$

  B. $\dfrac{\sqrt{2+\sqrt{3}}}{2}$

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

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

  E.   None of the above

12.   Problem 6.2.46 b

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

B. $\dfrac{\sqrt{2+\sqrt{3}}}{2}$

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

D. $-\dfrac{\sqrt{2+\sqrt{3}}}{2}$

E.   None of the above

13.   Problem 6.2.48 c

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

14.   Problem 6.2.48 f

A. $\dfrac{-\sqrt{70}}{10}$

B. $\dfrac{\sqrt{70}}{10}$

C. $\dfrac{-\sqrt{30}}{10}$

D. $\dfrac{\sqrt{30}}{10}$

E.   None of the above

15.	Problem 6.2.48 g

A.	$\dfrac{-\sqrt{70}}{10}$

B.	$\dfrac{\sqrt{70}}{10}$

C.	$\dfrac{\sqrt{30}}{10}$

D.	$\dfrac{-\sqrt{30}}{10}$

E.	None of the above