

Homework 23 (6.1)

The homework problems come from the exercises in Chapter 6 of the online text. Problem 6.1.8 refers to problem 8 in Chapter 6, Section 1. Record your answers to these problems in the EMCF titled “**Homework 23**”.

1. Problem 6.1.8

- A. $\sin x$
- B. $\sqrt{2}(\sin x)$
- C. $\sqrt{3}(\sin x)$
- D. $2 \sin x$
- E. None of the above

2. Problem 6.1.12

- A. $1/3$
- B. 3
- C. -3
- D. $-1/3$
- E. None of the above

3. Problem 6.1.18

- A. $1/2$
- B. $-1/2$
- C. $11/2$
- D. $-11/2$
- E. None of the above

4. Problem 6.1.20

- A. 0
- B. 1
- C. $1/2$
- D. $\frac{\sqrt{3}}{2}$
- E. None of the above

5. Problem 6.1.24

A. $\cos\left(\frac{12\pi}{35}\right)$

B. $\cos\left(\frac{2\pi}{35}\right)$

C. $\sin\left(\frac{2\pi}{35}\right)$

D. $\sin\left(\frac{12\pi}{35}\right)$

E. None of the above

6. Problem 6.1.36 a and b

A. $\frac{\pi}{3} + \frac{\pi}{4}$ $\frac{\pi}{6} + \frac{\pi}{4}$

B. $\frac{\pi}{6} + \frac{\pi}{3}$ $\frac{\pi}{6} + \frac{\pi}{3}$

C. $\frac{\pi}{6} + \frac{2\pi}{3}$ $\frac{\pi}{6} + \frac{2\pi}{3}$

D. $\frac{\pi}{6} + \frac{\pi}{4}$ $\frac{\pi}{3} + \frac{\pi}{4}$

E. None of the above

7. Problem 6.1.36 c and d

A. $\frac{\pi}{3} + \frac{3\pi}{4}$ $\frac{2\pi}{3} + \frac{\pi}{4}$

B. $\frac{3\pi}{4} + \frac{\pi}{3}$ $\frac{5\pi}{6} + \frac{\pi}{4}$

C. $\frac{\pi}{4} + \frac{2\pi}{3}$ $\frac{\pi}{6} + \frac{3\pi}{4}$

D. $\frac{5\pi}{6} + \frac{\pi}{4}$ $\frac{\pi}{3} + \frac{\pi}{4}$

E. None of the above

8. Problem 6.1.40 a

A. $\frac{11\pi}{6} - \frac{3\pi}{4}$

B. $\frac{7\pi}{4} - \frac{\pi}{6}$

C. $\frac{5\pi}{4} - \frac{\pi}{3}$

D. $\frac{11\pi}{4} - \frac{4\pi}{3}$

E. None of the above

9. Problem 6.1.40 c

A. $\frac{\pi}{3} - \frac{5\pi}{4}$

B. $\frac{\pi}{3} - \frac{9\pi}{4}$

C. $\frac{3\pi}{4} - \frac{11\pi}{4}$

D. $\frac{\pi}{6} - \frac{7\pi}{4}$

E. None of the above

10. Problem 6.1.42 a

A. $-\frac{\pi}{4} - \frac{\pi}{6}$

B. $-\frac{5\pi}{4} - \frac{2\pi}{3}$

C. $-\frac{5\pi}{6} - \frac{\pi}{4}$

D. $-\frac{\pi}{6} - \frac{3\pi}{4}$

E. None of the above

11. Problem 6.1.42 c

A. $-\frac{7\pi}{4} - \frac{2\pi}{3}$

B. $-\frac{\pi}{4} - \frac{5\pi}{6}$

C. $-\frac{7\pi}{4} - \frac{5\pi}{6}$

D. $-\frac{\pi}{6} - \frac{11\pi}{4}$

E. None of the above

12. Problem 6.1.48

A. $\frac{\sqrt{6} - \sqrt{2}}{4}$

B. $\frac{\sqrt{6} + \sqrt{2}}{2}$

C. $\frac{\sqrt{2} - \sqrt{6}}{4}$

D. $\frac{\sqrt{2} + \sqrt{6}}{4}$

E. None of the above

13. Problem 6.1.54

A. $\frac{\sqrt{2} - \sqrt{6}}{4}$

B. $\frac{\sqrt{2} + \sqrt{6}}{4}$

C. $\frac{\sqrt{6} - \sqrt{2}}{4}$

D. $\frac{\sqrt{6} + \sqrt{2}}{2}$

E. None of the above

14. Problem 6.1.56

A. $\frac{\sqrt{6} - \sqrt{2}}{4}$

B. $\frac{\sqrt{5} - \sqrt{3}}{4}$

C. $\frac{\sqrt{5} - \sqrt{2}}{4}$

D. $\frac{\sqrt{3} - \sqrt{2}}{4}$

E. None of the above

15. Problem 6.1.58

A. $\frac{\sqrt{6} - \sqrt{2}}{4}$

B. $\frac{-\sqrt{6} - \sqrt{2}}{4}$

C. $\frac{\sqrt{3}}{2}$

D. $\frac{\sqrt{2} - \sqrt{6}}{4}$

E. None of the above