

Math 1312
Homework 10

Enter your answers in the EMCF titled "Homework 10" at casa.uh.edu before the due date/time. If a problem comes from the exercises in the textbook then Problem 1.2.6 refers to Chapter 1, Section 2, problem number 6 etc.

1. Problem 4.4.10
 - A. a) Yes, b) Yes
 - B. a) Yes, b) No
 - C. a) No, b) Yes
 - D. a) No, b) No

2. Problem 4.4.12
 - A. 6.9
 - B. 6.3
 - C. 5.1
 - A. 7.5
 - B. None of the above

3. Problem 4.4.14
 - A. 2
 - B. 3
 - C. 4
 - D. 5
 - E. None of the above

4. Problem 4.4.20
 - A. 39
 - B. 10
 - C. 33
 - D. 13.5
 - E. None of the above

5. Consider regular pentagon $ABCDE$. If diagonal \overline{AC} is drawn, then a quadrilateral $ACDE$ is formed. Being as specific as possible, what type of quadrilateral is $ACDE$?
 - A. Trapezoid
 - B. Isosceles trapezoid
 - C. Kite
 - D. Parallelogram

6. Problem 5.1.4 c)

- A. $\frac{75}{1}$
- B. $\frac{30}{4}$
- C. $\frac{40}{3}$
- D. $\frac{3}{4}$
- E. None of the above

7. Problem 5.1.6 b)

- A. $x = 9$
- B. $x = 7$
- C. $x = 6$
- D. $x = 4$
- E. None of the above

8. Problem 5.1.10 b)

- A. $x = 8$
- B. $x = \bar{+}8$
- C. $x = 2\sqrt{14}$
- D. $x = 4\sqrt{14}$
- E. None of the above

9. Problem 5.1.14 b)

- A. $x = 2$
- B. $x = \bar{+}2$
- C. $x = 4$
- D. $x = \bar{+}4$
- E. No solution

10. Problem 5.1.18

- A. 192
- B. 147
- C. 196
- D. 200
- E. None of the above

11. Problem 5.1.26. Find the smallest angle only.

- A. 20°
- B. 24°
- C. 40°
- D. 48°
- E. None of the above

12. Problem 5.1.22 a)

- A. $4\sqrt{6}$
- B. $4\sqrt{10}$
- C. $4\sqrt{15}$
- D. $2\sqrt{15}$
- E. None of the above

For problems 13 – 15 determine the type of triangle if its angle measures are in a given ratio.
Give the best description possible.

13. 1: 1: 1

- A. Right
- B. Acute
- C. Obtuse
- D. Equilateral
- E. None of the above

14. 1: 4: 5

- A. Right
- B. Acute
- C. Obtuse
- D. Equilateral
- E. None of the above

15. 3: 3: 4

- A. Right
- B. Acute
- C. Obtuse
- D. Equilateral
- E. None of the above