

Math 1312
Homework 14

Enter your answers in the EMCF titled “Homework 13” 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 8.1.10
 - A. 420 *in.*
 - B. 210 *in.*
 - C. 580 *in.*
 - D. 290 *in.*
 - E. None of the above

2. Problem 8.1.16
 - A. 155 *ft.*
 - B. 120 *ft.*
 - C. 90 *ft.*
 - D. 105 *ft.*
 - E. None of the above

3. Problem 8.2.2
 - A. 42 *in.*
 - B. 46 *in.*
 - C. 36 *in.*
 - D. 48 *in.*
 - E. None of the above

4. Problem 8.2.4
 - A. 14
 - B. 28
 - C. 20
 - D. 26
 - E. None of the above

5. Problem 8.2.6
 - A. $9 + 3\sqrt{5}$
 - B. $3\sqrt{3} + 3\sqrt{5}$
 - C. $6 + 3\sqrt{5}$
 - D. $6\sqrt{8}$
 - E. None of the above

6. Find the area of a circle in terms of π if the radius is 5.
- A. 5π
 - B. 10π
 - C. 25π
 - D. 100π
 - E. None of the above
7. Find the area of a circle in terms of π if the diameter is 6.
- A. 3π
 - B. 6π
 - C. 9π
 - D. 36π
 - E. None of the above
8. Find the area of a circle in terms of π if the circumference is 8π .
- A. 4π
 - B. 8π
 - C. 16π
 - D. 64π
 - E. None of the above
9. Find the length of a 90° arc if the diameter is 20.
- A. 2.5π
 - B. 5π
 - C. 10π
 - D. 20π
 - E. None of the above
10. Find the length of a side of a square if the radius is 10.
- A. 10
 - B. 20
 - C. $5\sqrt{2}$
 - D. $10\sqrt{2}$
 - E. None of the above
11. Find the length of an apothem of a square if the perimeter is 40.
- A. 5
 - B. $5\sqrt{2}$
 - C. 10
 - D. $10\sqrt{2}$
 - E. None of the above

12. In an equilateral triangle, find the length of a radius if the length of a side is 12.
- A. $4\sqrt{3}$
 - B. $6\sqrt{3}$
 - C. $8\sqrt{3}$
 - D. 12
 - E. None of the above
13. Find the area of a square if the area of an inscribed circle is 25π .
- A. 25
 - B. 40
 - C. 50
 - D. 100
 - E. None of the above
14. What is the length of the longer diagonal of a rhombus if its area is 16 and the length of one of the diagonals is 8.
- A. 4
 - B. 8
 - C. 10
 - D. 16
 - E. None of the above
15. Apothems of a regular polygon are congruent.
- A. True
 - B. False