

Math 1312
Homework 12

Enter your answers in the EMCF titled "Homework 12" 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 5.5.2 a)
 - A. a
 - B. $a\sqrt{2}$
 - C. $2a$
 - D. $a\sqrt{3}$
 - E. None of the above

2. Problem 5.5.4 b)
 - A. a
 - B. $a\sqrt{2}$
 - C. $2a$
 - D. $a\sqrt{3}$
 - E. None of the above

3. Problem 5.5.6 Find XZ only. Give your answer in the simplest radical form.
 - A. 5
 - B. $5\sqrt{2}$
 - C. $10\sqrt{2}$
 - D. $\frac{5}{2}\sqrt{2}$
 - E. None of the above

4. Problem 5.5.10 Find DF only.
 - A. 6
 - B. $6\sqrt{2}$
 - C. $6\sqrt{3}$
 - D. 12
 - E. None of the above

5. Problem 5.5.14 Find RS only.
 - A. $6\sqrt{2}$
 - B. $3\sqrt{2}$
 - C. $3\sqrt{6}$
 - D. 6
 - E. None of the above

6. Problem 5.5.18
- A. 3
 - B. $3\sqrt{2}$
 - C. $3\sqrt{3}$
 - D. 6
 - E. None of the above
7. Problem 5.5.20 Find PQ only.
- A. 3
 - B. 6
 - C. $3\sqrt{2}$
 - D. $3\sqrt{3}$
 - E. None of the above
8. Problem 5.5.22
- A. $8\sqrt{3}$
 - B. $4\sqrt{3}$
 - C. $32\sqrt{3}$
 - D. $8\sqrt{2}$
 - E. None of the above
9. Problem 5.6.4
- A. a) True, b) True
 - B. a) False, b) True
 - C. a) True, b) False
 - D. a) False, b) False
10. Problem 5.6.6 Find FG only.
- A. 4
 - B. $3\frac{3}{7}$
 - C. $4\frac{2}{7}$
 - D. $5\frac{5}{6}$
 - E. None of the above
11. Problem 5.6.10
- F. 2.5
 - G. 7.5
 - H. 8
 - I. 12.5
 - J. None of the above

12. Problem 5.6.14

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

13. Problem 5.6.16

- A. $3\frac{6}{7}$
- B. $5\frac{1}{7}$
- C. 1
- D. $5\frac{2}{7}$
- E. None of the above

14. Problem 5.6.22 a)

- A. \overline{AE}
- B. \overline{EC}
- C. $AE = EC$

15. Finish the following statement.

The angle bisector of the vertex angle of an isosceles triangle splits the triangle into two

- A. congruent triangles.
- B. similar triangles.