

Math 1314
Homework 15

Enter your answers in the EMCF titled “Homework 15” at casa.uh.edu before the due date/time. In the problem numbers given below, 4.5.54 refers to Chapter 4, Section 5, Problem 54. The problems can be found in the online text.

1. Problem 4.5.54, part A

- A. $-0.6495, 0, 0.6495$
- B. $-0.125, 0, 0.125$
- C. $-0.125, 0.125$
- D. $-0.6495, 0.6495$
- E. None of the above

2. Problem 4.5.54, part B

- A. Relative maximum at $(-0.125, 1)$, relative minimum at $(0.125, -1)$
- B. Relative maximum at $(0.6495, 1)$, relative minimum at $(-0.6495, -1)$
- C. Relative maximum at $(-0.6495, -0.0001)$, relative minimum at $(0.6495, -0.0007)$
- D. Relative maximum at $(0.125, 1)$, relative minimum at $(-0.125, -1)$
- E. None of the above

Work the problems listed below. Round all answers and coefficients to *two* decimal places. Find the answer is the list of lettered answers below the list of problems. Answers in the answer bank can be used more than once or not at all.

3. Problem 4.7.40, time in seconds

4. Problem 4.7.40, max height in feet

5. Problem 4.7.42, length of one side of base (given in inches)

6. Problem 4.7.42, minimum cost (given in dollars)

7. Problem 4.7.46, max area (given in square meters)

8. Problem 4.7.50, find max area of all three fields (given in square yards)

9. Problem 4.7.54 (given in inches)

10. Problem 4.7.60, length of one side of base (given in feet)

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|----------|---------|------------|---------------|--------|
| A. 38.09 | B. 4682 | C. 2.11 | D. 180,000 | E. 98 |
| F. 9.90 | G. 4.58 | H. 540,000 | I. 4900 | J. 4.6 |
| K. 3817 | L. 24 | M. 2.17 | N. Not listed | |