

Math 1314
Homework 20

Enter your answers in the EMCF titled “Homework 20” at casa.uh.edu before the due date/time. In the problem numbers given below, Problem 5.6.12 refers to Chapter 5, Section 6, Problem 12. The problems can be found in the online text.

Work the problems listed below. Find the answer in the answer bank below the list of problems. Note, answers may be used more than once or not at all.

- 1. Problem 5.6.8**
- 2. Problem 5.6.16**
- 3. Problem 5.6.38**
- 4. Problem 5.6.54**
- 5. Problem 5.6.60**

- A. 18.875 B. 10.6667 C. 3.3333 D. 5.3333 E. 20.2702
F. 21.3333 G. 4.3333 H. 5.8889 I. 10.363 J. 7.3596
K. Not listed

- 6. Problem 5.6.48, set up the definite integral.**

- A. $\int_0^5 (x^2 - 5x) dx$ B. $\int_0^3 (x^2 - 5x) dx$
C. $\int_0^5 (-5x - x^2) dx$ D. $\int_{-5}^0 (-5x - x^2) dx$
E. Not listed

- 7. Problem 5.6.48, find the area.**

- A. 20.3333 B. 20.8333 C. 28.3333 D. 28.0833
E. Not listed

- 8. Problem 5.6.66, find the limits of integration.**

- A. -1.3535, 3.7078
B. -1.7343, -1.3435, 3.0778
C. -2.704, -2.4305, 0.6645
D. -1.3435, 3.0778
E. -1.7377, -1.3535, 3.7078
F. Not listed

9. Problem 5.6.66, set up the definite integral.

- A. $\int_{-2.704}^{-2.4305} \left[(0.35x^3 - 1.8x - 4) - (0.7x - 1.49) \right] dx + \int_{-2.4305}^{0.6645} \left[(0.7x - 1.49) - (0.35x^3 - 1.8x - 4) \right] dx$

B. $\int_{-1.7377}^{-1.3535} \left[(0.35x^3 - 1.8x - 4) - (0.7x - 1.49) \right] dx + \int_{-1.3535}^{3.7078} \left[(0.7x - 1.49) - (0.35x^3 - 1.8x - 4) \right] dx$

C. $\int_{-1.3435}^{3.0778} \left[(0.7x - 1.49) - (0.35x^3 - 1.8x - 4) \right] dx$

D. $\int_{-1.7343}^{-1.3435} \left[(0.7x - 1.49) - (0.35x^3 - 1.8x - 4) \right] dx + \int_{-1.3435}^{3.0778} \left[(0.35x^3 - 1.8x - 4) - (0.7x - 1.49) \right] dx$

E. $\int_{-1.7343}^{-1.3435} \left[(0.35x^3 - 1.8x - 4) - (0.7x - 1.49) \right] dx + \int_{-1.3435}^{3.0778} \left[(0.7x - 1.49) - (0.35x^3 - 1.8x - 4) \right] dx$

F. Not listed

10. Problem 5.6.66, find the area.