

Answer List:

1. Problem #1
 - (a) 1.997
 - (b) 2.347
 - (c) 30.271
 - (d) 7.375

2. Problem #2
 - (a) 1.599
 - (b) 8.779
 - (c) 11.310
 - (d) 25.061

3. Problem #3
 - (a) 1.056
 - (b) 13.900
 - (c) 6.006
 - (d) 0.218

4. Problem #4
 - (a) 6.638
 - (b) 77.337
 - (c) 35.629
 - (d) 89.495

5. Problem #5
 - (a) 2.395
 - (b) 20.987
 - (c) 34.032
 - (d) 1.584

6. Problem #6
 - (a) 0.744 *(Hint: Try splitting into two integrals.)
 - (b) 0.493
 - (c) 1.335 *(Hint: Try splitting into two integrals. Also try both disk and shell methods.)
 - (d) 3.252 *(Hint: Try splitting into two integrals. Also try both shell and washer methods.)

7. Problem #7
 - (a) 1.126 *(Hint: Try splitting into two integrals.)
 - (b) 16.131 *(Hint: Try splitting into two integrals. Also try both shell and washer methods.)
 - (c) 0.147 *(Hint: Try splitting into two integrals.)
 - (d) 12.945 *(Hint: Try solving for x in terms of y , and create an integral with respect to y .)