

Answers to FTC Worksheet #1

Answers

1. $\frac{32}{3}$
2. $\frac{7}{2}$
3. 2.932
4. 0.996
5. 3.837
6. 10.099 million, 14.099 million
7. 6.151
8. 9.2
9. $7 - 8\pi$
10. (a) 9.5 (b) 6.5 (c) $6.5 + 2\pi$
11. (a) 5 (b) 6.5
12. Answers will vary. With two triangles and a trapezoid: 13,350 liters; with two triangles and two trapezoids: 13,500 liters.
13. 67.828°C
14. a) 1 10 0
- b) Increasing (0, 2) (6, 8) because the derivative is positive ; decreasing (2, 6) because the derivative is negative
- c) CC Up (0, 1), (4, 7); CC down (2, 4), (7, 8)

Answers FTC Worksheet II

Answers

1. 29

2. 4

3. 741.636 liters

4. 136, 182, 232

5. (a) 14 (b) 4 (c) 8 (d) 0

6. 1, 0, $-\frac{1}{2}$, 0, 1

7. 21, 13, 15

8. 2.747

9. $8\frac{3}{4}$

10. (a) -12°F (b) $-\frac{2}{3}^{\circ}\text{F}/\text{min.}$

11. (a) 7 (b) $12 - 2\pi$

12. C

13. B