

Answers to Sample Questions III

1. A

2. D

3. E

4. D

5. A

6. C

7. D

8. E

9. C

10.

(a) $e^x - \frac{3}{x} - \ln|x| + C$

(b) $150x - 0.01e^x + 1000.01$

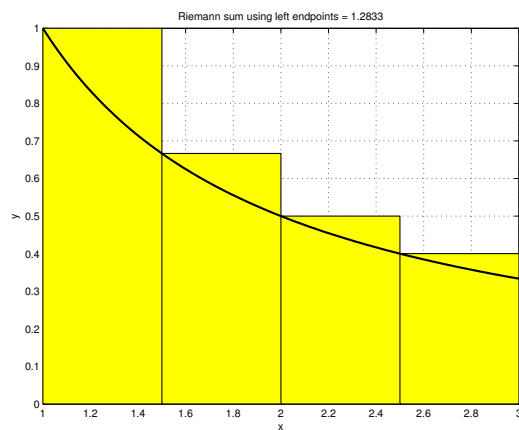
(c) $\frac{13}{3}$

(d) $2 \ln|x^2 + 1| + C$

11.

(a) $\frac{1}{2} \left(1 + \frac{2}{3} + \frac{1}{2} + \frac{2}{5} \right)$

(b)



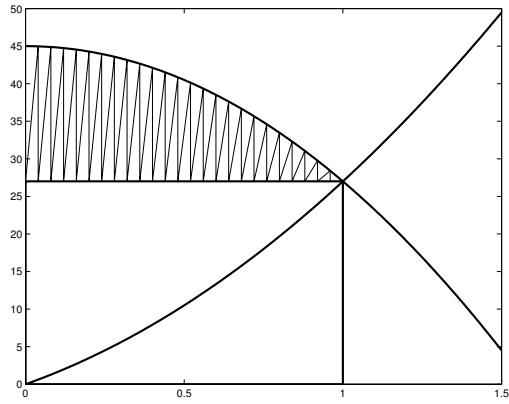
(c) $\ln 3$

12. $A = \int_0^3 (x - (x^2 - 2x)) dx = \frac{9}{2}$

13.

(a) $CS = \$12$ thousand dollars; $PS = 15.5$ thousand dollars

(b)



14.

(a) 85 ft

(b) 119.5 ft

(c) 108 ft