

Problem Set 94

2a. 0

b. $x(6) = 5$

4a. $a(t) = -9.8$

$v(t) = -9.8t + 20$

$h(t) = -4.9t^2 + 20t + 20$

b. $a(2) = -9.8 \text{ m/sec}^2$

$v(2) = 0.4 \text{ m/sec}$

$h(2) = 40.4 \text{ m}$

c. $t = 4.912 \text{ sec}$

6. $\pi \int_{-1}^1 (y^4 - 4y^2 + 3) dy$

8. $2\pi \int_2^3 (4 - x)e^x dx$

10. -2.103803403

12. $\frac{2\sqrt{3}}{3}$

14. $\frac{1}{6}$

16. $\frac{3\pi}{4}$

18. $c = 0$

20. $a = 0;$ $b \in \{\text{reals}\}$

22. 0

24. A