

Answer List

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|------------|-----------------------------|-----------|
| 1. | 2. d | 3. a |
| 4. a | 5. 0, 1.5, 4.5, 6, -1.5, -3 | 6. 13, 10 |
| 7. 185 | 8. b | 9. c |
| 10. b | 11. c | 12. c |
| 13. 64, 78 | | |

Textbook ch. 5 Review pp. 273-276.

5. (RAM with $\Delta t = 20$) = 356
 RRAM = 436
 Average = TRAPEZOID = 396
 $\int_0^{100} f(t) dt \approx 396$

6. Area = 13, Integral = 1

15. Distance ≈ 310 mi/h-sec to within 10 mi/h-sec.
 ≈ 455 feet to within ≈ 15 feet.
 by counting area. conversion
 $5280/3600.$

18. $2 \int_2^5 f(x) dx + 3 - 3 = 17$
 $\int_2^5 f(x) dx = \boxed{4}$

19. $\int_{-2}^2 f(x) dx = 0. \int_2^3 f(x) dx = \boxed{30}$

20. $\int_0^2 f(x) dx = \frac{1}{2} \left[\int_{-2}^2 f(x) dx \right] = \boxed{10}$

21. $av(f) = \frac{1}{5-2} \int_2^5 f(x) = 4. \text{ Ans: } \boxed{42}$

22. Area of two triangles $\frac{1}{2} \cdot 1 \cdot 1 + \frac{1}{2} \cdot 1 \cdot 1 = \boxed{1}$



23. $\boxed{0}$ because function is odd.

29. a, $t = 20$ MIN.

b, $t = 40$ MIN.

c, $t = 20$ MIN.
 POSITION
 $\approx 5 - 2 = 3$ KM

d, $t = 60$ MIN.
 POSITION
 $\approx 3 + 10.8 = 13.8$ KM.

35. $V < IV < 0 < II < III < I$

36. a, $2 \int_0^2 f(x) dx$

b, $\int_0^5 f(x) dx - \int_2^5 f(x) dx$

c, $\int_{-2}^5 f(x) dx - \frac{1}{2} \int_{-2}^2 f(x) dx$

40. THIS GRAPH MAY BE USEFUL.

