APPENDIX C. ANSWERS 335

- **1091.** (a) 0 (b) -1 (c) $-\pi$ (d) 1 (e) $y = 2x + 2 \pi$ (f) -1 and 2 (g) $[-2\pi, 0]$
- **1092.** (a) 63 (b) 234.9
- **1093.** $-\cos x + \sin x + 2$
- **1094.** (a) $f(x) = x^3 + 4x^2 + 3x 2$ (b) $-\frac{2}{3}$
- **1095.** (a) up (b) -2.049, no (c) 3.827 (d) 1.173
- **1096.** (a) A (b) $\frac{1}{2}A$ (c) 4
- **1097.** (a) 0.316
- **1098.** (a) $x(t) = 4t^3 18t^2 + 15t 1$ (b) $\frac{1}{2}, \frac{5}{2}$ (c) max of 15 (d) 17
- **1099.** (a) -23 (b) 33 (c) 11, 16, -8 (d) a, c
- **1100.** (a) 3 (c) $f(x) = \frac{3}{x}$
- **1101.** (a) 258.6 gal (b) yes (c) 10.785 gal/hr
- **1102**. D
- **1103.** C
- **1104**. D
- **1105**. E
- **1106**. E
- **1107.** B
- **1108**. B
- **1109.** D
- **1110**. A
- **1111.** D
- **1112.** C
- **1113**. B
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- **1114.** C
- **1115**. B
- 1116. D1117. C
- **1118.** E
- **1119**. E