

Solutions to WIR 6 Review Problems

1. a.) $\Delta y = -1.25$
b.) $dy = -1$
c.) graph not available
2. a.) 1.005 or $201/200$
b.) $\frac{180 + \sqrt{3}\pi}{360}$
3. $L(x) = -4x + 4$
4. $L(x) = 1 + \frac{1}{3}x$
 $\sqrt[3]{.95}$ is approximately $295/300$ or $.98335$
 $\sqrt[3]{1.1}$ is approximately $31/30$ or 1.0333
5. $\frac{1}{4} - \frac{1}{4}(x - 2) + \frac{3}{16}(x - 2)^2$
6. $dA = 9.6\pi\text{cm}^2$
7. $x_3 = -1.6978$
8. 1.584893
9. 1.435477
10. Graph not available
11. 0
12. $e^{sx}(rx^{r-1} + sx^r)$
13. $\frac{3}{8}$
14. a.) $\frac{1}{e^{2x}\sqrt{4 - e^{-2x}}}$
b.) $-3e^{-x} \tan^2 e^{-x} \sec^2 e^{-x}$