

Please let me know if you find any typos or errors in the answers below.

Section 4.3:

2, $12e^{1+4x}$

4, $e^x(-1+x)/x^2$

8, $e^{-x^2}(1-2x^2)$

12, $-e^{1/x}/x^2$

14, $1/x$

16, $(1+\ln x)/2$

22, $(t+2t\ln t)/3$

26, $(6u)/(-1+u^2)$

40, max: 1, min: $1/e$

44, max: $(\ln 2)/2$, min: 0

Section A.3:

2, 0

4, -5

6, $-1/3$

10, 0

12, 0

14, 1

16, ∞