EII Info    Thursday July 27: L’Hospital and Chapter 11 Series

Book 11.9  p751  5, 7, 13a, 25, 34, 37a
Problems 11.10  p765  2, 5, 11, 15, 19, 25

EII Practice

A) Find power series in $x$ for the following.

a) Write the first three non-zero terms;

b) Write using summation notation

1) $\frac{x}{(1 - x)^2}$

2) $x \ln(1 - x^2)$

3) $e^{-x^2}$

4) $\int \frac{1}{(1 - x)^2} \, dx$

5) Find $T_3$ for $f(x) = (1 - x)^{-\frac{1}{2}}, \, a = 0$.

6) Find $T_4$ for $f(x) = x^{-2}, \, a = 1$.

6) Find $T_3$ for $f(x) = (1 + x)^{-2}, \, a = 0$.

8) Let $f(x) = \cos(x)$. Find $T_3$ for $a = \frac{\pi}{2}$.