

1. determine the Taylor polynomial.
 $T_2(x)$ at 3

$$f(x) = \frac{x}{x+2}$$

2. show that $T_2(x) \sim f(x)$.
with an error > 0.1 on the interval
 $[2, 4]$

5. a determine the interval of the
convergence of the power series.
$$\sum_{n=1}^{\infty} \frac{(-1)^n}{n \cdot 3^n} (x-3)^n$$

6. using your answer to pt. A.
determine the interval of the
convergence of the power
series.

$$\sum_{n=1}^{\infty} \frac{(-1)^n}{3^n} (\cancel{x-3}) (x-3)^{n-1}$$