Given the series answer the following questions

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

1) List the first 4 terms of the series and the general term

2) Enter the first 4 terms of the series into your calculator. Use the window X[0, 2] and Y[-1, 3]

3) What function does it look like the series represents

4) Substitute x^2 for x in the series you found in #1

Given the series answer the following questions

$$\sum_{n=0}^{\infty}(-1)^n \frac{x^{4n+2}}{n!}$$

1) List the first 4 terms of the series and the general term

2) Substitute x^3 for x in the series you found in #1