# MATH 009C - Summer 2017 

Quiz 7: August 8, 2017

1. Find the radius of convergence and interval of convergence for the power series.

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

2. Find the Taylor series centered at zero for the following function.

$$
f(x)=x \cos \left(\frac{1}{2} x^{2}\right)
$$

Please, show all work.

