

MATH 126 SPRING 2011, QUIZ 11

(1) Find the interval and radius of convergence of $\sum_{n=1}^{\infty} \frac{(x+3)^n}{n(-9)^n}$.

(2) Determine whether the series is convergent or divergent. You should justify your answer and indicate the test you are using

(a) $\sum_{n=1}^{\infty} \frac{\cos(n\pi)}{\sqrt{n+9}}$ (b) $\sum_{n=1}^{\infty} (-1)^n \left(1 - \frac{1}{n}\right)$ (c) $\sum_{n=2}^{\infty} (-1)^n \frac{n2^n}{(n-1)!}$.