Calculus 1B Quiz 4 Name:

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1. Find the interval and radius of convergence of

$$\sum_{n=0}^{\infty} \frac{(x-8)^n}{n!\ 3^n}$$

(turn over)

2. Suppose

$$\sum_{n=0}^{\infty} c_n x^n$$

is a power series with $c_n > 0$ for every n. Its radius of convergence is R with $0 < R < \infty$. If the power series converges at $x = R$, show that it must converge at $x = -R$.