

AP Calculus BC
Unit 9 – (Days 1 - 4) – QUIZ REVIEW

Name: _____

Test each of the following for convergence or divergence, using each of the following test once. Identify the test you used.

- a) nth-Term Test
- b) Geometric Series Test
- c) p-Series Test
- d) Telescoping Series Test
- e) Integral Test
- f) Direct Comparison Test
- g) Limit Comparison Test

1) $\sum_{n=1}^{\infty} \frac{\sqrt{n}}{n}$	2) $\sum_{n=0}^{\infty} 5 \left(-\frac{1}{5}\right)^n$
3) $\sum_{n=1}^{\infty} \frac{1}{3^n + 2}$	4) $\sum_{n=4}^{\infty} \frac{1}{3n^2 - 2n - 15}$

5)

$$\sum_{n=1}^{\infty} \frac{n}{2n+3}$$

6)

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

7)

$$\sum_{n=1}^{\infty} \frac{3}{n(n+3)}$$