

ESP Quiz 6 (Kouba)

Please PRINT your name here :

This quiz is due next Tuesday at the beginning of ESP.

1.) (10 pts. each) Do the following series converge or diverge ? Briefly explain and name the test that you are using.

a.)
$$\sum_{n=3}^{\infty} \frac{1}{n^{0.999}}$$

b.)
$$\sum_{n=2}^{\infty} 3\left(\frac{-5}{4}\right)^{n+3}$$

c.)
$$\sum_{n=1}^{\infty} \frac{2n+3}{3n+4}$$

d.)
$$\sum_{n=1}^{\infty} \left(\frac{1}{n+3} - \frac{1}{n+4} \right)$$

2.) (10 pts. each) Determine the value of the following convergent series :

$$12 - 8 + 16/3 - 32/9 + 64/27 - \dots$$