

Name: _____

Math 232 Quiz 7

1. (5 pts each) Determine whether the series is convergent or divergent. *Find the sum* if it is convergent. If it is divergent, explain why.

(a)
$$\sum_{n=1}^{\infty} \frac{2^{n-1}}{3^n}$$

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

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

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