

(C2-7.5) Name:

Homework Questions 5 – Sum to Infinity

1. Find the sum to infinity of these sequences

a) 6, 3, 1.5, 0.75

b) 25, 20, 16, 12.8

c) 100, -20, 4, -0.8

2. Find the common ratio and hence the first 4 terms of these geometric sequences if the first term is given and also the sum to infinity if given.

a) $S_{\infty} = 6\frac{2}{3}$ $t_1 = 5$

b) $S_{\infty} = 127\frac{1}{9}$ $t^1 = 143$

c) $S_{\infty} = 96\frac{2}{3}$ $t_1 = 29$

d) $S_{\infty} = 40$ $t_1 = 60$