

4A10, 2012, Answers

Q1 –

Q2 –

Q3

(a) –

(b) $\omega/k = a_1 - ia_2k$; $d\omega/dk = a_1 - 2ia_2k$

(c) $k = (\alpha + i)/2$; $\alpha^2 > 1$

Q4

(a) –

(b) –

(c) –

(d) $a^2 = \frac{4}{3q\tau\omega^2} U(qU - p)$