Name: _____
Matriculation Number: _____

1. Map the positive imaginary axis, i.e., $s = j\omega, \quad 0 < \omega \leq R \quad where, \quad R \to \infty$

   on to the F(s) plane for

$$(i)F(s) = \frac{1}{s+2}, \quad (ii)F(s) = \frac{s+1}{s+10}, \quad (iii) \quad F(s) = \frac{s-4}{s+2}$$

   Hint: You can use one of the two methods –

   (a) Graphical method – drawing vectors from poles and zeros to a point moving on the imaginary axis (as explained during lecture)

   (b) Analytical method – express modulus and argument of F(jω) as function of ω and see how they vary as ω is varied from 0 to ∞