EE3140 Quiz 6, Spring 2002

1. A pulse generator having an internal resistance of 25Ω produces a pulse of amplitude 15V and duration 1µs with no transmission line connected. A 50Ω line, 400m long and open-circuited at the far end, is connected to the generator. In the spaces below, sketch the voltage reflection diagram and the voltage at z=400m, assuming that z = 0 is at the load and the phase velocity is 200m/µs (5 points each).