

1.

(b) -60.0° , -43.0° , 0.666

(c) 0.640, 0.428, 0.048 (~5% loss)

(d) 4.94, 0.90

2.

(c) (i) -22.5° , -50.0°

(ii) 6.3%

(iii) 0.546

3.

(b) 1310 m/s

(c) 1300 m/s, 0.4% increase