

(1) a)  $\alpha = 83.62^\circ$ ;  $\beta = 48.19^\circ$ ;  $\gamma = 48.19^\circ$  c)  $\alpha = 10.83^\circ$ ;  $\beta = 45.77^\circ$ ;  $\gamma = 123.40^\circ$   
b)  $\alpha = 53.97^\circ$ ;  $\beta = 78.83^\circ$ ;  $\gamma = 47.20^\circ$  d)  $\alpha = 130.45^\circ$ ;  $\beta = 12.68^\circ$ ;  $\gamma = 36.87^\circ$

(2)  $7.55 \text{ km}$

(3)  $31.99^\circ$

(4)  $710.3 \text{ m}$

(5) a) in A  $96.53^\circ$ ; in B  $26.4^\circ$   
b)  $1573.4 \text{ m}$