

(1) a)  $a = 36\text{ cm}$       b)  $a = 81.41\text{ cm}$       c)  $a = 20.21\text{ cm}$   
d)  $c = 86.6\text{ cm}$       e)  $a = 32.91\text{ cm}$       f)  $c = 93.53\text{ cm}$

(2)  $a = 6.71\text{ cm}$

(3) a)  $\alpha = 36.87^\circ$       b)  $\alpha = 64.01^\circ$       c)  $\alpha = 24.99^\circ$   
 $\beta = 53.13^\circ$        $\beta = 25.99^\circ$        $\beta = 65.01^\circ$

(4)  $h = 109.49\text{ m}$

(5)  $h = 28.5\text{ m}$