

### 'A Cocoa Catastrophe'

a) Number of trees planted are when  $n = 0$   $C = 16500 \times 0.82^n$   
 $= 16500 \times 1$   
 $= 16500$  (1)

b)  $0.82 \times 100 = 82\%$   
 $100 - 82 = 18\%$  (2)

c) Let  $n = 4$   $16500 \times 0.82^4$   
 $= 7460.01$   
 $16500 \div 2$   
 $= 8250$   
 $7460 < 8250$  (2)