

Start here for

Question Number:

8

a) $P = A e^{kt}$ $t = 25$

$P = 102 \times e^{25 \times 1960784.314}$ $k = 1960784.314$

$= 2000000,000 \times e^{25k}$ $A = 102$

~~2000000000~~

b) Probability of both showing heads = 0.36
 trials

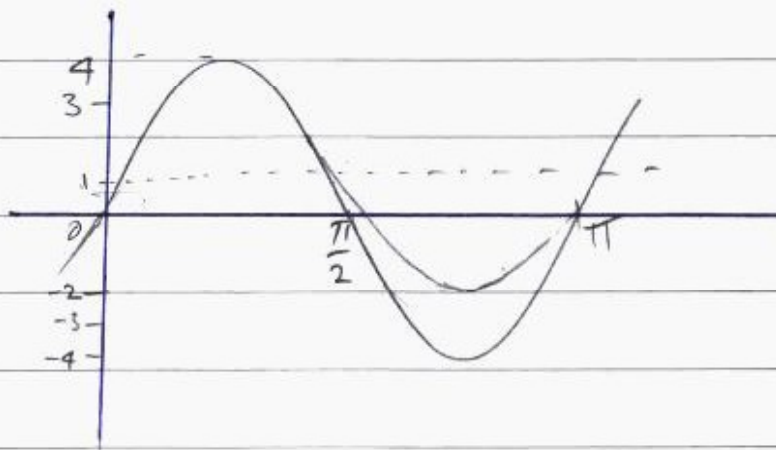
$P = 1 - 0.36$

$= 0.64$

c) i) $A = 4$

ii) $b = \pi$

iii)



d) $f(x) = x^3 - 3x^2 + kx + 8$