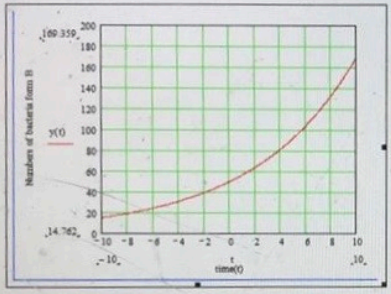
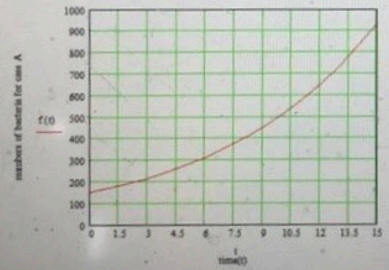
$y(t) := 50 \cdot \exp(0.122 \cdot t)$

$f(t) := 150 \cdot \exp(0.122 \cdot t)$

$t := 0, 1 .. 15$

y(t) =	f(t) =
50	150
56.488	169.463
63.817	191.452
72.098	216.293
81.453	244.358
92.022	276.065
103.962	311.885
117.451	352.354
132.691	398.073
149.908	449.725
169.359	508.078
191.334	574.003
216.161	648.483
244.209	732.626
275.896	827.687
311.694	935.083





Ngbono gg Emmanuel
81/ENG06/005
Mechanical Engineering

Case 1 : $e^{kt} = 3$

at $t = 9$

$e^{9k} = 3$

$9k = \ln 3$

$k = 0.122$

$y = 50e^{0.122t}$

Case 2 $\rightarrow$ $y = 150e^{0.122t}$