กลุ่มประชากร

1 Highly Responsible
2 Moderatly Responsible
3 Normal
4 Risky
5 Immune

R_t	R_r
0.1	0.1
0.3	0.3
1.6	1.6
2.2	2.2
0.0	0.0

10 %
20 %
40 %
30 % → 1000
0 %

Person (P)
100 ax → 1000

R_U

Path

$f(R_{t_{G_1-G_5}}, R_{i_{G_1-G_5}}, P, R_U)$

$N = 60,000,000$

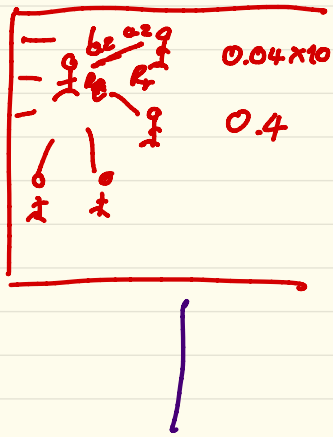
$N_1(0) = 6$ mil → 6,0
$N_2(0) = 12$ mil → 12,0
$N_3(0) = 24$ mil → 24,0
$N_4(0) = 18$ mil → 18,0
$N_5(0) = 0$ → 0.0001

$N_1(1)$
$N_2(1)$
$N_3(1)$

กรณี Simple exponential model.

ประชากร $N = 60$ mil ติดเชื้อกลุ่มแรก
ทุกคนมีค่าเฉลี่ย R_t, R_r เท่ากัน / Person (P) = 10
สมมุติว่า $R_t = R_r = 0.04$

		Normal	Infected	Heal
Initial	Day 0	60,000,000	10	0
	Day 1	59,999,996	14	6
	Day 2			
	⋮			
	Day 21			10



⋮

$-58,500,000$ $1,000,000$ $500,000$

$R_t R_r = 0.4$ $R_t R_r = 0$

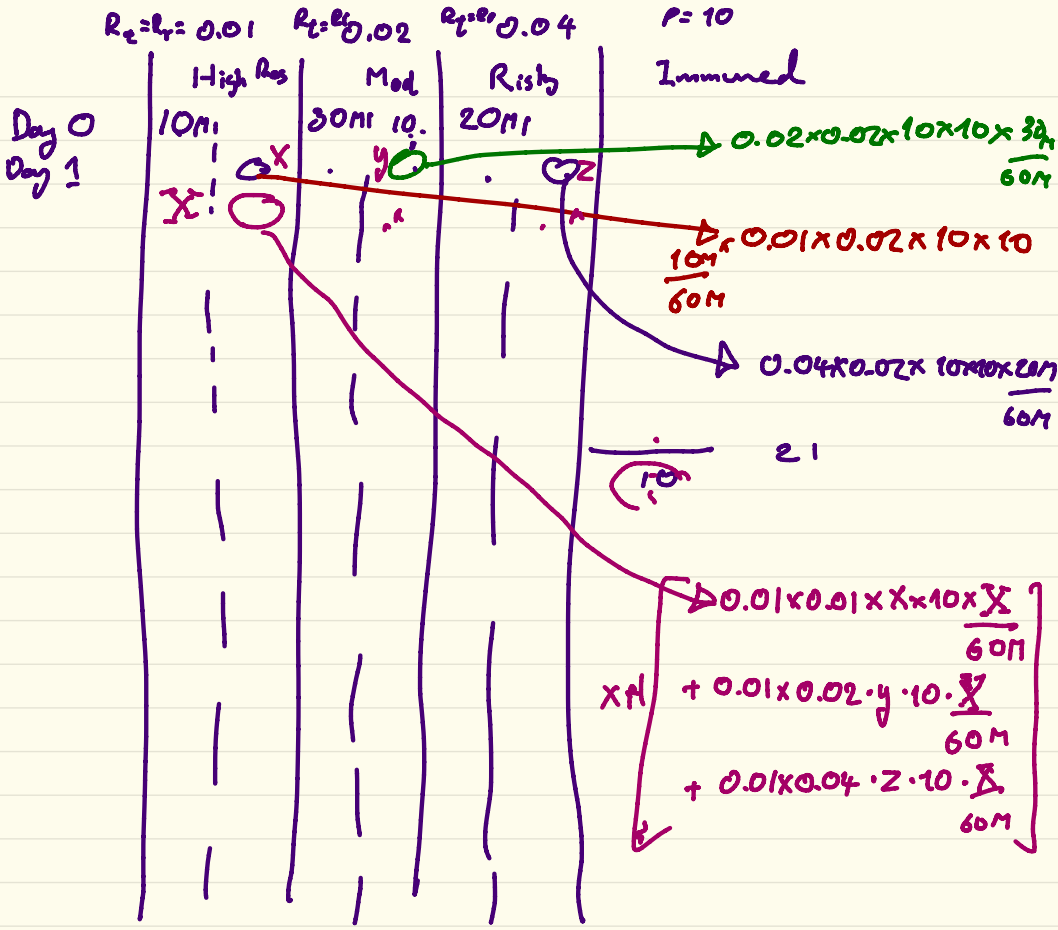
58.5 ≈ 60

⋮

$1,000,000$ $59,000,000$ $60,000,000$

$R_0 = 2.0$

$\frac{1}{60} \times 0.04 \times 50,000,000 \times 10$ =


$R_2 = R_1 = 0.01$
$R_2 = R_1 = 0.02$
$R_2 = R_1 = 0.04$
P = 10
High Risk
Mod
Risky
Immune
Day 0
Day 1
10M
30M
10
20M
X
y
Z
$0.02 \times 0.02 \times 10 \times 10 \times \frac{30}{60M}$
$0.01 \times 0.02 \times 10 \times 10 \times \frac{10}{60M}$
$0.04 \times 0.02 \times 10 \times 10 \times \frac{20}{60M}$
2 1
$0.01 \times 0.01 \times X \times 10 \times \frac{X}{60M}$
XM
$+ 0.01 \times 0.02 \cdot y \cdot 10 \cdot \frac{X}{60M}$
$+ 0.01 \times 0.04 \cdot Z \cdot 10 \cdot \frac{X}{60M}$