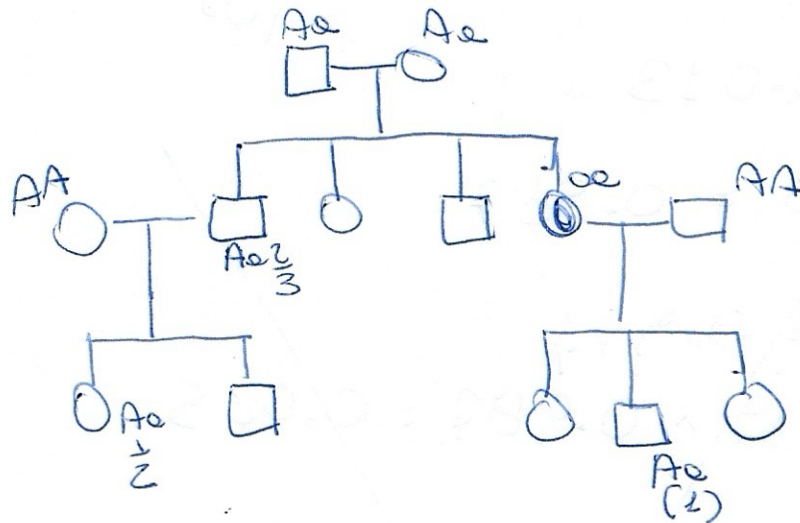


COMPITO B

Es # 2



(1)

$$P(aa) = \frac{2}{3} \times \frac{1}{2} \times \frac{1}{4} = \frac{1}{12} ; P(A-) = \frac{11}{12}$$

$$P = \frac{4!}{3!1!} \left(\frac{11}{12}\right)^3 \left(\frac{1}{12}\right)$$

(2)

II 2		III 3	
Aa		Aa	→ Aa
$\frac{2}{3}$		1	$\frac{1}{2} = \frac{1}{3}$
AA		Aa	
$\frac{1}{3}$		1	$\frac{1}{2} = \frac{1}{6}$

$$P = \frac{1}{3} + \frac{1}{6} = \frac{1}{2} \quad P = \left(\frac{1}{2}\right)^3 = \frac{1}{8}$$

ES #2

$$q^2 = 1/5500 ; q = \sqrt{1/5500} = 0.013$$

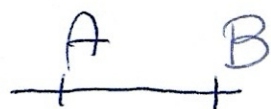
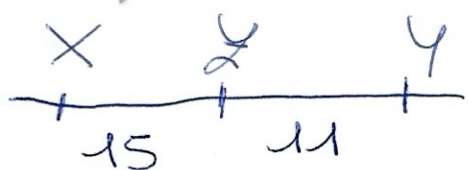
$$p = 1 - 0.013 = 0.987$$

$$p^2 = (0.987)^2 = 0.974$$

$$2pq = 2 \times 0.013 \times 0.987 = 0.025$$

$$P = \left(\frac{2pq}{2pq + p^2} \right)^2 \times \frac{1}{4} = \left(\frac{0.025}{0.025 + 0.974} \right)^2 \times \frac{1}{4} = 1.59 \times 10^{-4}$$

ES #3



$$I = 0.55$$

$$c = 0.45$$

$$\text{DCO} = \frac{x + z}{x + y} \times \frac{+ b}{a +} \times \frac{x y z}{x y z} ; \frac{a b}{a b}$$

(a)

$$\text{DCO} = 0.15 \times 0.11 \times 0.45 = 0.0074$$

$$\text{SIR} = 0.15 - 0.0074 = \frac{0.1426}{2} = 0.0713$$

$$P_{\text{IR}} = 0.0713 \times \frac{1}{2} = 0.0356 \times 3750 = 133$$

$$(b) I = 38\% = c = 0.62$$

$$\text{DCO} = 0.15 \times 0.11 \times 0.62 = 0.010$$

$$\text{SIR} = 0.11 - 0.010 = \frac{0.1}{2} = 0.05$$

$$F_{tot} = 0.05 \times 0.04 = 0.002 = 0.08:2$$

Es # 9

crosses # 1 $glu^+ thr^- sup^R$

2 $glu^- thr^+ sup^S$

3 $glu^- thr^- sup^R$