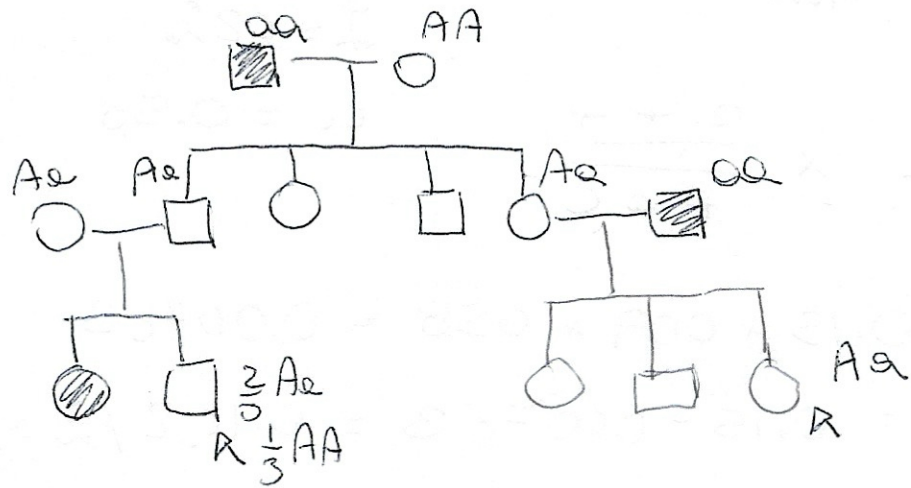


COMPITO A

1)



(a)

$$\text{III } 2 \times \text{III } 5 \rightarrow Aa$$

$$\begin{matrix} AA & \times & Aa & \times & Aa \\ \frac{1}{3} & \times & 1 & \times & \frac{1}{2} \end{matrix} = \frac{1}{6}$$

$$\begin{matrix} Aa & \times & Aa & \times & Aa \\ \frac{2}{3} & \times & 1 & \times & \frac{1}{2} \end{matrix} = \frac{1}{3}$$

$$P = \frac{1}{3} + \frac{1}{6} = \frac{1}{2}$$

$$(b) P(aa) = \frac{2}{3} \times 1 \times \frac{1}{4} = \frac{1}{6} \quad P(A^-) = \frac{5}{6}$$

$$P_{3 \text{ SANI}} = \left(\frac{5}{6}\right)^3$$

$$P = 1 - \left(\frac{5}{6}\right)^3 = 0.43$$

$$2) \frac{a}{15\mu\text{m}} \frac{b}{90\mu\text{m}} c$$

$$I = 42\%$$

$$CC = 0.58$$

$$(a) \frac{a + +}{+ b c} \times \frac{a + +}{+ b c}$$

$$DOPPI = 0.15 \times 0.09 \times 0.58 = 0.00783$$

$$Sc. I_{reg} = 0.15 - 0.00783 = 0.14217 \approx 0.142 / 2 = 0.071$$

$$P = (0.071)^2 \times 195000 = 431$$

$$(b) \frac{a + +}{+ b c} \times \frac{a b c}{a b c}$$

$$0.15 \times 0.09 \times 0.37 = 0.005$$

$$P = 0.005 \times 3500 = 17.5$$

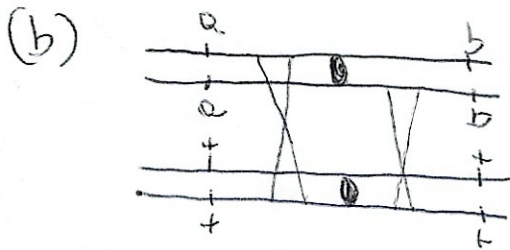
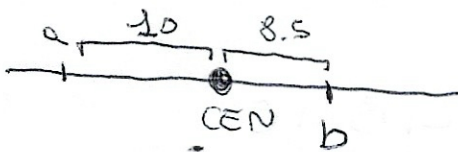
- 3)
- 1) + + - -
 - 2) + + + +
 - 3) - + - +
 - 4) - + + +
 - 5) - - - -

$$4) d_{Q-CEN} = \frac{1}{2} \left(\frac{36 + 7 + 3 + 3}{230} \right) = \frac{1}{2} \cdot \frac{49}{230} = 0.10 \rightarrow 10 \mu m$$

$$d_{b-CEN} = \frac{1}{2} \left(\frac{26 + 7 + 3 + 3}{230} \right) = \frac{1}{2} \times \frac{39}{230} = 0.085 \rightarrow 8.5 \mu m$$

$$d_{a-b} = \frac{3 + 1/2(36 + 26 + 7)}{230} = \frac{37.5}{230} = 0.163 \rightarrow 16.3 \mu m$$

GENI DA PARTI OPPOSITE



D
+ b
e +
+ +
e b

5) MED

$$A'A' = 250$$

$$A'A^2 = 150$$

$$A^2A^2 = 100$$

$$P(A') = \frac{(250 \times 2) + 150}{2 \times 500} = \frac{500 + 150}{1000} =$$

$$= \frac{650}{1000} = 0.65$$

$$P(A^2) = 1 - 0.65 = 0.35$$

$$P^2(A'A) = (0.65)^2 \times 500 = 211$$

$$2PQ(A'A^2) = 2 \times 0.65 \times 0.35 \times 500 = 227.5 \approx 228$$

$$Q^2(A^2A^2) = (0.35)^2 \times 500 = 61$$

| | OSS | ATT | $(O - A)^2 / A$ |
|-------------------------------|-----|-----|---------------------|
| A'A' | 250 | 211 | 7.2 |
| A'A ² | 150 | 228 | 26.7 |
| A ² A ² | 100 | 61 | 24.9 |
| | | | <hr/> 58.8 χ^2 |

$g_e = 1$

POPOLAZIONE NON IN EQUILIBRIO