

Solutions

Each answer shows the steps, then the **result**.

2.1

- $p + q = 1$ and $p^2 + 2pq + q^2 = 1$

2.2

- $p = 1 - 0.3 = 0.7$

2.3

- Homozygous recessive

3.1 C

- $2pq$

3.2

(a)

- $q^2 = 0.09$, so $q = 0.3$; $p = 1 - 0.3 = 0.7$

(b)

- $2pq = 2(0.7)(0.3) = 0.42$ (42%)

3.3

- Any two: no natural selection, no mutation, no gene flow (migration), random mating, very large population