Tugas pertemuan 5 → Georgia & gisandrea - 535230080

6 flash disk
- 2 jazz < wanita / pria
- 3 pop rock
- 1 pop indonesia

↳ diambil 3

→ $N = {_6}C_3 = \dfrac{6!}{3!\,3!} = \dfrac{6 \cdot 5 \cdot 4 \cdot 3!}{3! \cdot 3!} = 20$

1. Peluang Pop Indonesia harus terambil

$$n(c) = \binom{1}{1}\binom{5}{2} = \dfrac{1!}{1!\,0!} \cdot \dfrac{5!}{3!\,2!} = 1 \cdot \dfrac{5 \cdot 4 \cdot \overset{2}{3!}}{3! \cdot 2!} = 10 \qquad P(M) = \dfrac{10}{20} = \dfrac{1}{2}\;/\!/$$

2. Masing-masing jenis terambil 1

$$n(c) = \binom{1}{1}\binom{2}{1}\binom{3}{1} = \dfrac{1!}{1!\,0!} \cdot \dfrac{2!}{1!\,1!} \cdot \dfrac{3!}{2!\,1!} = 1 \cdot 2 \cdot 3 = 6 \qquad P(M) = \dfrac{6}{20} = \dfrac{3}{10}\;/\!/$$

3. Paling banyak Pop Rock terambil 2

po prock 0   poprock 1   Pop rock 2

$$\binom{3}{3} + \binom{3}{1}\binom{3}{2} + \binom{3}{2}\binom{3}{1} = \dfrac{3!}{3!\,0!} + \dfrac{3!}{2!\,1!} \cdot \dfrac{3!}{1!\,2!} + \dfrac{3!}{1!\,2!} \cdot \dfrac{3!}{2!\,1!} = 1 + 3 \cdot 3 + 3 \cdot 3$$
$$= 1 + 9 + 9$$
$$= 19$$

$$P(M) = \dfrac{19}{20}\;/\!/$$

4. Tidak ingin terambil jazz pria
↳ brarti jumlah disk = 5, diambil 3

$$_5C_3 = \dfrac{5!}{3!\,2!} = \dfrac{5 \cdot 4 \cdot \overset{2}{3!}}{3! \cdot 2} = 10 \qquad P(M) = \dfrac{10}{20} = \dfrac{1}{2}\;/\!/$$