Kombinasi Bagian 2

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Jawaban

17. # 1 Laki , 4 Perempuan

$C_1^8 \times C_4^4 = 8 \times 1 = 8$

2 Laki , 3 Perempuan

$C_2^8 \times C_3^4 = 28 \times 4 = 112$

$= \frac{8!}{6!2!} = \frac{8 \times 7 \times 6!}{6! \cdot 2!} = \frac{56}{2} = 28$

$= \frac{4!}{1!3!} = \frac{4 \times 3!}{3!} = 4$

3 Laki , 2 Perempuan

$C_3^8 \times C_2^4 = 336$

$= \frac{8!}{5!3!} = \frac{8 \times 7 \times 6 \times 5!}{5! \cdot 3!} = \frac{336}{6} = 56$

$\frac{4!}{2!2!} = \frac{4 \times 3 \times 2!}{3! \cdot 2!} = \frac{12}{2} = 6$

4 Laki , 1 Perempuan

$C_4^8 \times C_1^4 = 70 \times 4 = 280$

$\frac{8!}{4!4!} = \frac{8 \times 7 \times 6 \times 5 \times 4!}{4! \cdot 4!} = \frac{1680}{24} = 70$

$8 + 112 + 336 + 280 = 736$

Nama : Rafi Ikhwansyah

2). ~~Bep bangak~~

$x_1 + x_2 + x_3 + x_4 + x_5 = 16$, jika $x_1 \geq 1$ sedangkan $x_5 = 2$

~~Case I~~

~~$x_1 = 2 \quad x_2 = \quad x_3 = \quad x_4 = \quad x_5 = 2$~~

Misal :

$(x_1 + 2) + x_2 + x_3 + x_4 + 2 = 16$

$x_1 + x_2 + x_3 + x_4 = 16 - 9$

$x_1 + x_2 + x_3 + x_4 = 12$

$r = 12$

$n = 4$

$C = (n + r - 1, r) = C(4 + 12 - 1, 12)$

$C^{15}_{12} = \frac{15!}{3!\,12!} = \frac{15 \times 14 \times 13 \times \cancel{12!}}{3!\,\cancel{13!}} = 455$