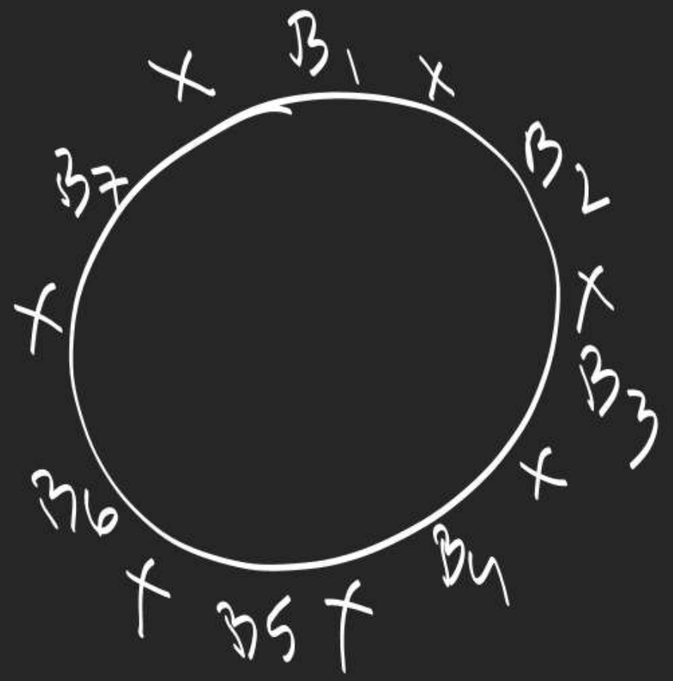
garlands

1:

$^{10}C_6 \frac{5!}{2}$

2:



$6! \times 7!$

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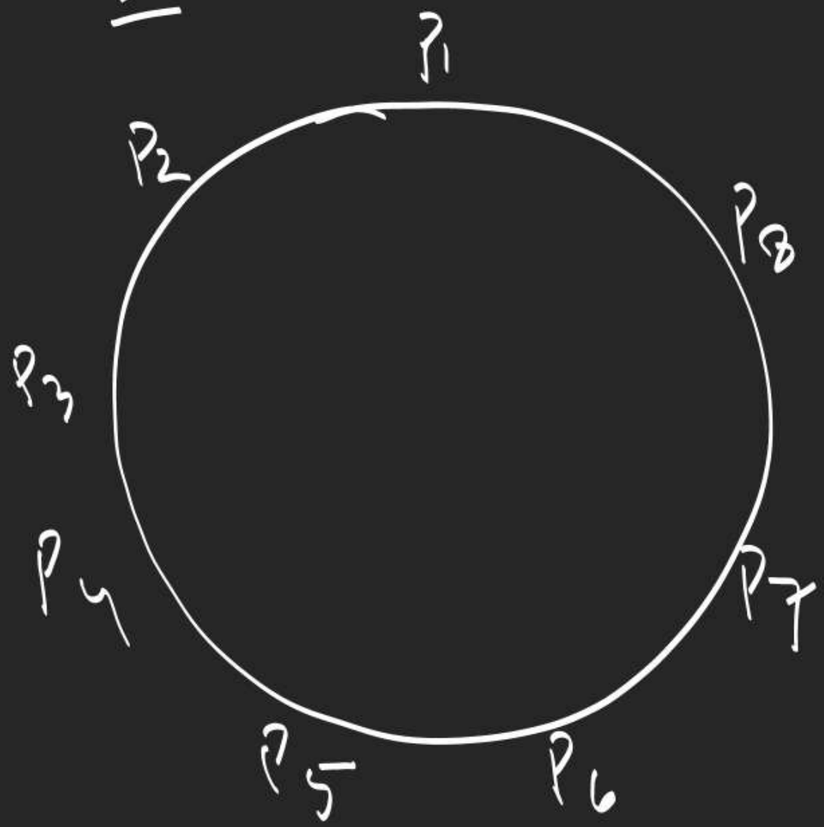
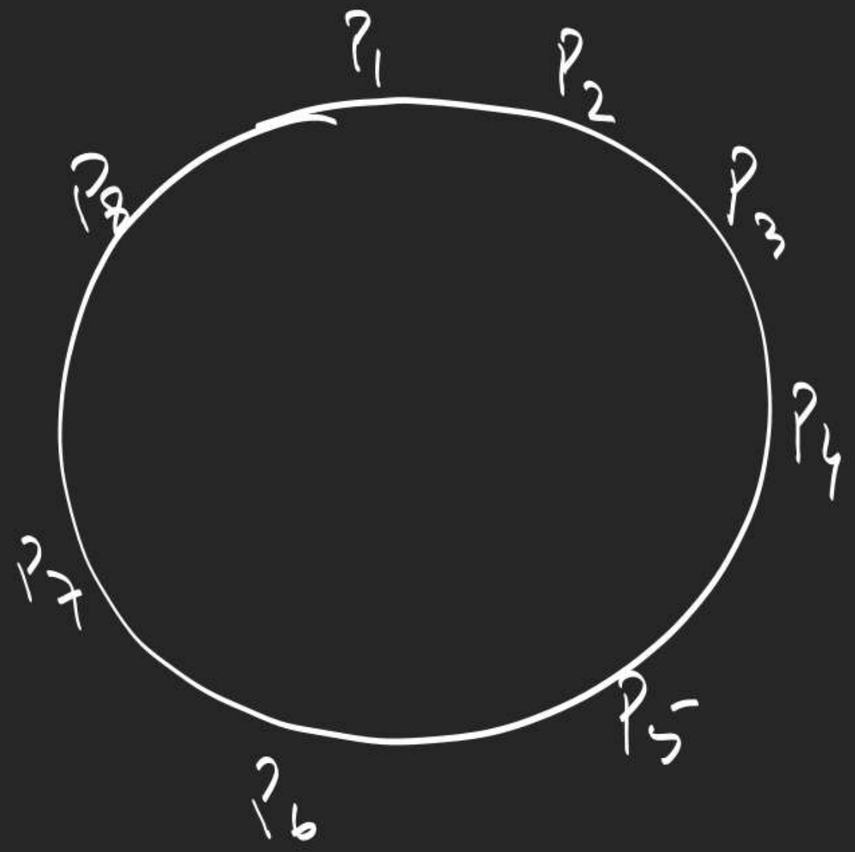
3:

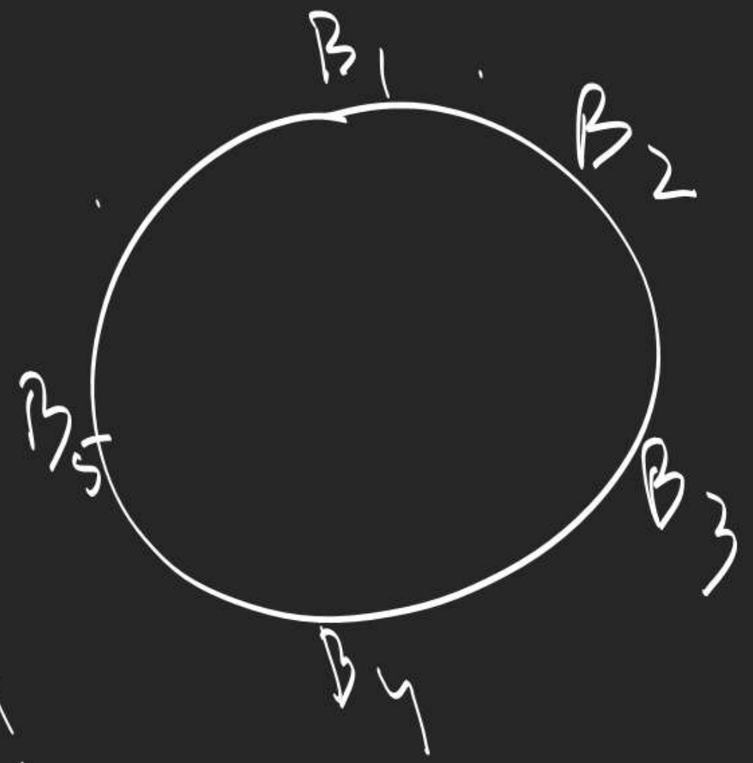




71/2

4.

$B_1 G_1$



$4! \times 3 \times 4!$

$4!5! - 3!4! {}^{8}C_1$

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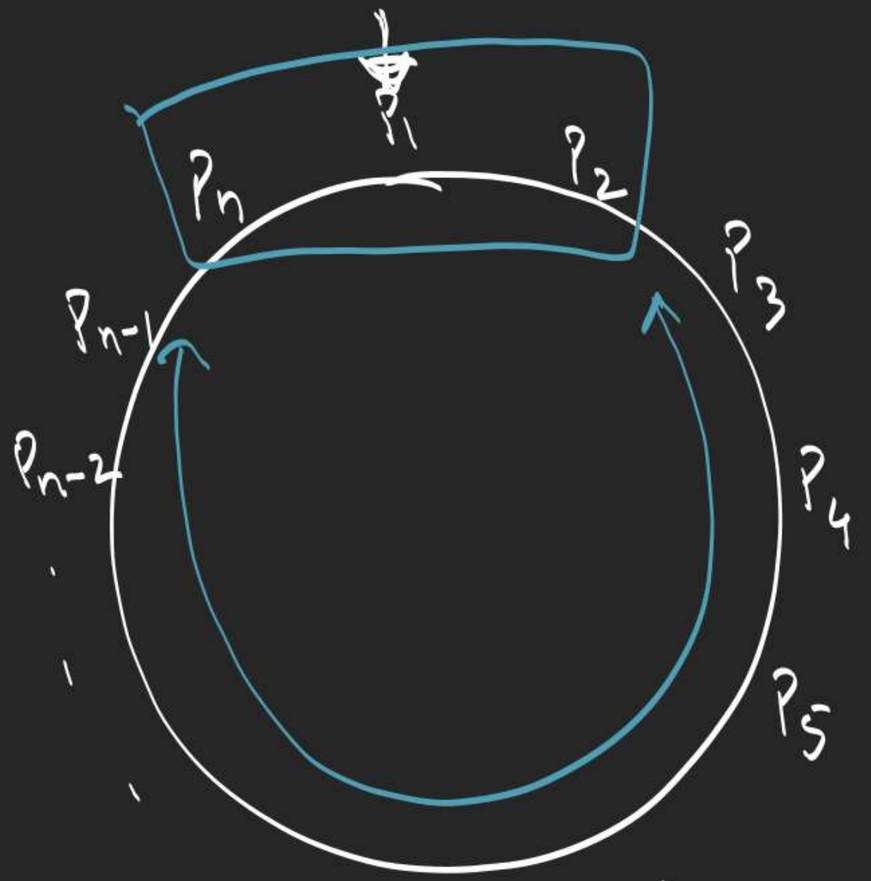
5.



$${}^nC_3 - \left(n + (n-4)n\right)$$

$$\frac{{}^nC_1 \times {}^{n-4}C_2}{3}$$

P_1 P_3 P_6

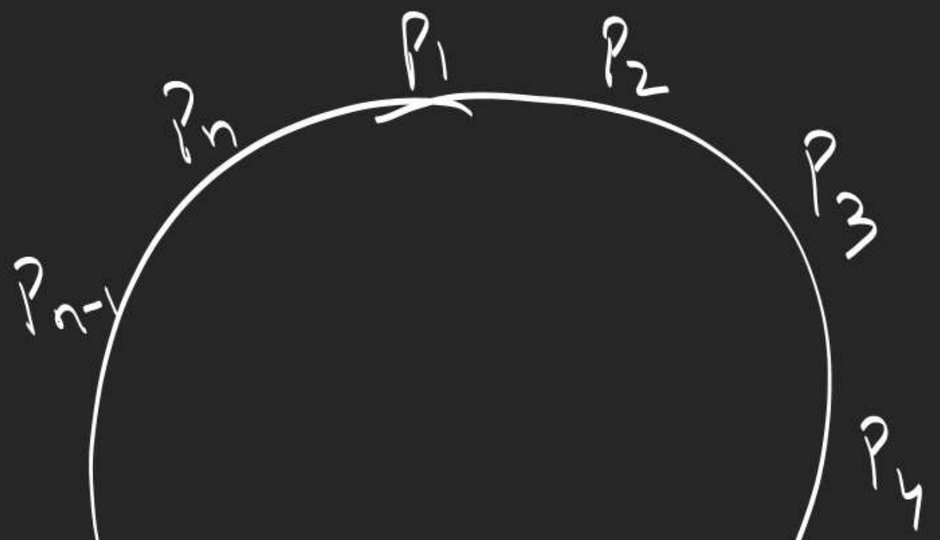
P_1 P_6

P_3 P_6 P_1 P_3

$n-3$ — 2 — $n-5$

x — x — x — x — x

x — x



$$^{n-2}C_3 - {}^{n-4}C_1$$

$\checkmark \; \checkmark \quad X - X - X - X - X \cdots X - X \; \checkmark$

$\underline{P_1}\; P_2\; P_3 \cdots P_{n-1}\; \underline{P_n}$

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6.

$$\frac{{}^{15}C_1 \; {}^{8}C_5}{6}$$

${}^{10}C_6 - {}^{8}C_4$

2 American
2 British
2 Chinese
1 Dutch
1 Egyptian

1 German
1 French

7: 2A, 2B, 2C, 1D, 1E, 1F, 1G

AA

$$9! - \left[{}^{3}C_1\, 2!\, 8! - {}^{3}C_2\, 7!\, 2!\, 2! + 6!\, 2!\, 2!\, 2! \right]$$

DPP-7