14 students

Ahmed, elsayed, mariam, yousef, ibrahim

solution ⇒ permution $\frac{n!}{(n-r)!} = \frac{14!}{(14-5)!} = 240240$

17 14 students توافيق الترتيب مش مهم $\frac{n!}{r!(n-r)!} = \frac{14!}{3!11!} = 364$

[illegible]

1> 2 student
250 student — توافيق — $\frac{n!}{r!(n-r)!} = 250$

2> choice
case 1 — $3 \times 2 = 6$

3> rings 3 — start and end with 1 6 — $1 \times 2 \times 2 \times 2 \times 1 = 8$

4> 3 awards — تباديل — $\frac{n!}{(n-r)!} = \frac{30!}{(30-3)!} = 24360$
30 players

5> 3 books — توافيق — $\frac{n!}{r!(n-r)!} = \frac{6!}{3!\times 3!} = 20$
6 solution

6> $3 = 6 \times 6 \times 6 = 216$ — $P = \frac{P(E)}{P(n)} = \frac{9}{216} = \frac{1}{24}$
$P(3) = 9$

7> 3books (r)
n ← solution

condition: If there are 2 books that should not be chosen together?

$\frac{n!}{r!(n-r)!} = \frac{6!}{2! \times 4!} = 15$

8> class 25 students
2 students "Ahmed"
2 students "elsayed"
2 students "mariam"
2 students "yousef"
22 students different name
