ComputePrep

Permutation and combination questions with answers

15 exam-shaped questions with full worked solutions.
For IBPS · SBI · SSC · Railway quant.

Free, share it forward. Every question in this set was generated and verified by the ComputePrep engine — the same one behind the free daily timed drill at **computeprep.com**.

The questions

Work them on paper first. Full solutions start after question 15 — the numbering matches.

QUESTION 1

In how many different ways can they be arranged?

5 students are to stand in a single row for a photograph.

A. 120
B. 126
C. 24
D. 25
E. 20

QUESTION 2

In how many ways can it be done?

A committee of 2 members is to be formed from 8 people.

A. 56
B. 28
C. 16
D. 58
E. 21

QUESTION 3

How many distinct arrangements are there?

Consider all arrangements of the letters of the word "GREEN".

A. 30
B. 61
C. 120
D. 60
E. 24

QUESTION 4

How many distinct arrangements are there?

Consider all arrangements of the letters of the word "PLANET".

A. 733
B. 726
C. 36
D. 120
E. 720

QUESTION 5

How many distinct arrangements are there?

Consider all arrangements of the letters of the word "FRIEND".

A. 722
B. 120
C. 724
D. 732
E. 720

QUESTION 6

In how many ways can the team be chosen?

A team of 2 men and 3 women is to be chosen from 4 men and 4 women.

A. 10
B. 34
C. 288
D. 56
E. 24

QUESTION 7

In how many ways can it be done?

A committee of 2 members is to be formed from 6 people.

A. 55
B. 15
C. 12
D. 30
E. 21

QUESTION 8

In how many different ways can they be arranged?

4 students are to stand in a single row for a photograph.

A. 8
B. 6
C. 12
D. 24
E. 16

QUESTION 9

In how many ways can the medals be won?

8 athletes run a race. Gold, silver and bronze medals are awarded.

A. 512
B. 56
C. 336
D. 348
E. 24

QUESTION 10

How many distinct arrangements are there?

Consider all arrangements of the letters of the word "GREEN".

A. 30
B. 60
C. 20
D. 24
E. 120

QUESTION 11

How many distinct arrangements are there?

Consider all arrangements of the letters of the word "SUMMER".

A. 366
B. 720
C. 360
D. 373
E. 120

QUESTION 12

In how many ways can the medals be won?

7 athletes run a race. Gold, silver and bronze medals are awarded.

A. 35
B. 210
C. 21
D. 42
E. 180

QUESTION 13

In how many ways can it be done?

A committee of 3 members is to be formed from 6 people.

A. 20
B. 10
C. 120
D. 22
E. 18

QUESTION 14

In how many ways can it be done?

A committee of 2 members is to be formed from 6 people.

A. 29
B. 15
C. 35
D. 27
E. 30

QUESTION 15

How many distinct arrangements are there?

Consider all arrangements of the letters of the word "GARDEN".

A. 36

B. 120

C. 721

D. 30

E. 720

Answers and worked solutions

Each walkthrough is the engine's own elimination order, step for step — not a reconstruction written after the fact.

SOLUTION 1

Answer: **120**

1. Each position is filled in turn: 5 choices, then 4, and so on down to 1.
2. Arrangements = 5! = 5 × 4 × 3 × 2 × 1 = 120.
3. Answer: 120.

SOLUTION 2

Answer: **28**

1. A committee has no order — SELECTIONS, so use nCr, not nPr.
2. 8C2 = 8P2 ÷ 2! = 56 ÷ 2 = 28.
3. Answer: 28.

SOLUTION 3

Answer: **60**

1. "GREEN" has 5 letters with one letter repeated twice — divide by 2! for the repeat.
2. Arrangements = 5! ÷ 2! = 120 ÷ 2 = 60.
3. Answer: 60.

SOLUTION 4

Answer: **720**

1. All 6 letters of "PLANET" are different, so every ordering is distinct.
2. Arrangements = 6! = 720.
3. Answer: 720.

SOLUTION 5

Answer: **720**

1. All 6 letters of "FRIEND" are different, so every ordering is distinct.
2. Arrangements = 6! = 720.
3. Answer: 720.

SOLUTION 6

Answer: **24**

1. Choose each group separately, then MULTIPLY (both choices happen together).
2. 4C2 × 4C3 = 6 × 4 = 24.
3. Answer: 24.

SOLUTION 7

Answer: **15**

1. A committee has no order — SELECTIONS, so use nCr, not nPr.
2. 6C2 = 6P2 ÷ 2! = 30 ÷ 2 = 15.
3. Answer: 15.

SOLUTION 8

Answer: **24**

1. Each position is filled in turn: 4 choices, then 3, and so on down to 1.
2. Arrangements = 4! = 4 × 3 × 2 × 1 = 24.
3. Answer: 24.

SOLUTION 9

Answer: **336**

1. The three medals are DIFFERENT, so order matters — use nPr, not nCr.
2. 8P3 = 8 × 7 × 6 = 336.
3. Answer: 336.

SOLUTION 10

Answer: **60**

1. "GREEN" has 5 letters with one letter repeated twice — divide by 2! for the repeat.
2. Arrangements = 5! ÷ 2! = 120 ÷ 2 = 60.
3. Answer: 60.

SOLUTION 11

Answer: **360**

1. "SUMMER" has 6 letters with one letter repeated twice — divide by 2! for the repeat.
2. Arrangements = 6! ÷ 2! = 720 ÷ 2 = 360.
3. Answer: 360.

SOLUTION 12

Answer: **210**

1. The three medals are DIFFERENT, so order matters — use nPr, not nCr.
2. 7P3 = 7 × 6 × 5 = 210.
3. Answer: 210.

SOLUTION 13

Answer: **20**

1. A committee has no order — SELECTIONS, so use nCr, not nPr.
2. 6C3 = 6P3 ÷ 3! = 120 ÷ 6 = 20.
3. Answer: 20.

SOLUTION 14

Answer: **15**

1. A committee has no order — SELECTIONS, so use nCr, not nPr.
2. 6C2 = 6P2 ÷ 2! = 30 ÷ 2 = 15.
3. Answer: 15.

SOLUTION 15

Answer: **720**

1. All 6 letters of "GARDEN" are different, so every ordering is distinct.
2. Arrangements = 6! = 720.
3. Answer: 720.

One round a day beats one set a month.

A worked set teaches the shape; a clock teaches the speed. ComputePrep serves a free timed round every day, with a streak, a leaderboard and the full walkthrough after every round.

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