Counting: Permutations & Combinations · 1

Evaluate C(6, 3), the number of combinations of 6 things taken 3 at a time.

Counting: Permutations & Combinations · 2

A club has 7 members. How many different 2-person committees can be chosen?

Counting: Permutations & Combinations · 3

9 runners race. In how many ways can the gold, silver and bronze medals be awarded?

Counting: Permutations & Combinations · 4

7 people meet and every person shakes hands with every other person once. How many handshakes are there?

Counting: Permutations & Combinations · 5

A team of 2 girls and 2 boys is chosen from 8 girls and 6 boys. How many different teams are possible?

Counting: Permutations & Combinations · 6

Evaluate C(9, 4), the number of combinations of 9 things taken 4 at a time.

Counting: Permutations & Combinations · 7

A club has 11 members. How many different 3-person committees can be chosen?

Counting: Permutations & Combinations · 8

A club has 12 members. How many different 2-person committees can be chosen?

Counting: Permutations & Combinations · 2

ANSWER

21

Counting: Permutations & Combinations · 1

ANSWER

20

Counting: Permutations & Combinations · 4

ANSWER

21

Counting: Permutations & Combinations · 3

ANSWER

504

Counting: Permutations & Combinations · 6

ANSWER

126

Counting: Permutations & Combinations · 5

ANSWER

420

Counting: Permutations & Combinations · 8

ANSWER

66

Counting: Permutations & Combinations · 7

ANSWER

165

Counting: Permutations & Combinations · 9

17 people meet and every person shakes hands with every other person once. How many handshakes are there?

Counting: Permutations & Combinations · 10

A team of 2 girls and 2 boys is chosen from 5 girls and 6 boys. How many different teams are possible?

Counting: Permutations & Combinations · 11

Evaluate C(12, 5), the number of combinations of 12 things taken 5 at a time.

Counting: Permutations & Combinations · 12

A club has 8 members. How many different 4-person committees can be chosen?

Counting: Permutations & Combinations · 13

6 runners race. In how many ways can the gold, silver and bronze medals be awarded?

Counting: Permutations & Combinations · 14

5 people meet and every person shakes hands with every other person once. How many handshakes are there?

Counting: Permutations & Combinations · 15

A team of 2 girls and 2 boys is chosen from 7 girls and 5 boys. How many different teams are possible?

Counting: Permutations & Combinations · 16

Evaluate C(11, 2), the number of combinations of 11 things taken 2 at a time.

Counting: Permutations & Combinations · 10

ANSWER

150

Counting: Permutations & Combinations · 9

ANSWER

136

Counting: Permutations & Combinations · 12

ANSWER

70

Counting: Permutations & Combinations · 11

ANSWER

792

Counting: Permutations & Combinations · 14

ANSWER

10

Counting: Permutations & Combinations · 13

ANSWER

120

Counting: Permutations & Combinations · 16

ANSWER

55

Counting: Permutations & Combinations · 15

ANSWER

210

Counting: Permutations & Combinations · 17

A club has 14 members. How many different 3-person committees can be chosen?

Counting: Permutations & Combinations · 18

12 runners race. In how many ways can the gold, silver and bronze medals be awarded?

Counting: Permutations & Combinations · 19

8 people meet and every person shakes hands with every other person once. How many handshakes are there?

Counting: Permutations & Combinations · 20

A team of 2 girls and 2 boys is chosen from 4 girls and 6 boys. How many different teams are possible?

Counting: Permutations & Combinations · 21

Evaluate C(8, 2), the number of combinations of 8 things taken 2 at a time.

Counting: Permutations & Combinations · 22

A club has 6 members. How many different 3-person committees can be chosen?

Counting: Permutations & Combinations · 23

18 people meet and every person shakes hands with every other person once. How many handshakes are there?

Counting: Permutations & Combinations · 24

A team of 2 girls and 2 boys is chosen from 6 girls and 6 boys. How many different teams are possible?

Counting: Permutations & Combinations · 18

ANSWER

1320

Counting: Permutations & Combinations · 17

ANSWER

364

Counting: Permutations & Combinations · 20

ANSWER

90

Counting: Permutations & Combinations · 19

ANSWER

28

Counting: Permutations & Combinations · 22

ANSWER

20

Counting: Permutations & Combinations · 21

ANSWER

28

Counting: Permutations & Combinations · 24

ANSWER

225

Counting: Permutations & Combinations · 23

ANSWER

153