Permutation and Combination 237



Answers

Definition of permutation, Number of permutations with or without repetition, Conditional permutations

1	b	2	c	3	a	4	d	5	b
6	a	7	b	8	a	9	c	10	c
11	d	12	a	13	d	14	a	15	a
16	c	17	c	18	a	19	d	20	a
21	c	22	a	23	c	24	c	25	a
26	a	27	d	28	b	29	b	30	a
31	c	32	a	33	c	34	a	35	b
36	a	37	b	38	b	39	c	40	a
41	a	42	b	43	b	44	b	45	d
46	c	47	b	48	a	49	b	50	b
51	b	52	c	53	b	54	c	55	d
56	c	57	c	58	a	59	b	60	c
61	b	62	a	63	d	64	c	65	d
66	a	67	a	68	c	69	c	70	a
71	c	72	c	73	c	74	c	75	С

Circular permutations

1	c	2	a	3	b	4	d	5	a
6	d	7	b	8	a	9	b	10	a
11	b	12	d	13	a	14	a		

Definition of combinations, Condition combinations, Division into groups, Derangements

1	a	2	c	3	d	4	a	5	a
6	c	7	c	8	b	9	b	10	d
11	c	12	c	13	d	14	a	15	b
16	d	17	a	18	b	19	c	20	a
21	b	22	d	23	d	24	b	25	c
26	b	27	d	28	b	29	a	30	с
31	c	32	d	33	a	34	b	35	d

36	a	37	c	38	c	39	c	40	a
41	b	42	d	43	b	44	a	45	c
46	c	47	a	48	b	49	b	50	a
51	a	52	b	53	c	54	c	55	b
56	c	57	a	58	d	59	a	60	c
61	b	62	b	63	c	64	c	65	a
66	b	67	a	68	b	69	c	70	b
71	b	72	d	73	a	74	a	75	a
76	d	77	b	78	b	79	b	80	d
81	b	82	a	83	b	84	b	85	a

Geometrical problems

1	c	2	b	3	b	4	a	5	a
6	c	7	d	8	a	9	b	10	a
11	b	12	b	13	c	14	a	15	c
16	c	17	a	18	d	19	c,b	20	a
21	b	22	a	23	c	24	b	25	c
26	d								

Multinomial theorem, Number of divisors, Miscellaneous problems

6 b 7 d 8 c 9 c 10 c 11 b 12 d 13 b 14 a 15 c 16 a 17 b 18 a 19 b 20 d	1	a	2	d	3	a	4	d	5	a
	6	b	7	d	8	c	9	c	10	c
16 a 17 b 18 a 19 b 20 d	11	b	12	d	13	b	14	a	15	c
	16	a	17	b	18	a	19	b	20	d
21 b	21	b								

Critical Thinking Questions

1	a	2	c	3	b	4	c	5	c
6	b	7	a	8	a	9	b	10	a
11	a	12	a	13	b	14	b	15	a
16	a	17	a	18	c	19	b	20	c
21	d	22	c	23	c	24	c	25	c
26	c	27	b	28	b	29	b	30	d
31	a	32	a	33	c	34	c	35	d
36	b	37	d	38	b	39	c	40	a