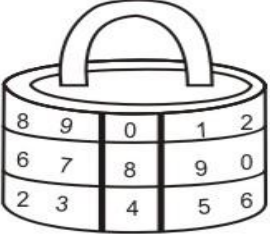# Set 17

Subject: Mathematics

Grade: 8th

S.N	Folder Number & Question Code	Topic	Question with Answer Options	Image (If Any)	Correct Answer (Option-A,B,C,D)
1	3_19 Mathematics 2766	Playing with numbers	The digits 1 to 8 appear once each in Razaq's 8-digit phone number. The sum of the first three digits is the same as that of the last 3 digits. All the even digits in the number come together. The largest total of two consecutive digits in the number is 13. Which of the following is Razaq's phone number?		C

	Answer Options			
	Options A	Options B	Options C	Options D
	37426851	37642851	37462851	37462581

S.N	Folder Number & Question Code	Topic	Question with Answer Options	Image (If Any)	Correct Answer (Option-A,B,C,D)
2	3_19 Mathematics 2763	Playing with numbers	Between 1 and 100, how many whole numbers are there which leave a remainder 1 when divided by 6, and also when divided by 10?		B

	Answer Options			
	Options A	Options B	Options C	Options D
	4	3	2	1

| 3 | 5_29 & | Playing with | If m and n are two numbers such that 0 < m < 1 and - | | A |

	1693	numbers	1 < n < 0, then their product will be		

Answer Options			
Options A	**Options B**	**Options C**	**Options D**
a number between 0 and -1	a number between 0 and 1	a number between -1 and -2	a number less than –2

4	5_26& 1702	Playing with numbers	**Starting from 1, what will be sum of the first 25 odd natural numbers?**		C

Answer Options			
Options A	**Options B**	**Options C**	**Options D**
25	**125**	**625**	**2500**

5	**5_26 & 1703**	**Playing with numbers**	Neeraj puts a new combination lock on a cupboard. The lock has 3 rotating rows with the digits 0 to 9 on each row. The correct 3-digit code has to be aligned vertically in the frame in order to open the lock. A month later, Neeraj forgets the code. He tries all possible combinations one by one, and does not try any combination twice. If each combination takes one second to try, what is the MAXIMUM amount of time he might have to spend before the lock opens?	Alignment of digits for the code 084	C
6	**5_29 Mathematics 1704**	**Playing with numbers**	After this, Neeraj decides to change the combination on the lock such that the sum of the three digits in the code is 3, his lucky number.How many different possible codes could he choose from?		B

Answer Options			
Options A	**Options B**	**Options C**	**Options D**
10	6	4	3

7	5_28	Playing	**What will be the value of (3 + 2) times (10 -4)**		B

	Mathematics 10036	**with numbers**	**divide 2 & -1**		

	Answer Options			
	Options A	**Options B**	**Options C**	**Options D**
	8	14	15	30

| 8 | **5_28 Mathematics 10050** | **Playing with numbers** | Altaf picked up two number cards from the four cards shown below. He found that one of the remaining numbers was the sum, and the other was the difference of the two numbers he had picked | | C |

	Answer Options			
	Options A	**Options B**	**Options C**	**Options D**
	1 and 2	2 and 5	2 and 3	5 and 3

| 9 | **5_28 Mathematics 10069** | **Playing with numbers** | Gina has a brief case which she can lock using a 3-digit code using any of the digits 1, 2, 3 and 4. How many different 3-digit codes can she form using these four digits? | | B |

	Answer Options			
	Options A	**Options B**	**Options C**	**Options D**
	3 × 4	4 × 4× 4	3 × 3 × 3 × 3	3 + 3 + 3

| 10 | **5_28 Mathematics 10070** | **Playing with numbers** | A player's TOTAL score is calculated by adding each turn's score to the previous total. Which of the following could be Priyanka's score after 4 rounds of the game? | | D |

	Answer Options			
	Options A	**Options B**	**Options C**	**Options D**
	6	88	145	None

11	5_28 Mathematics 10071	Playing with numbers	What could be the MAXIMUM possible difference between the total scores of two players after 10 rounds of this game?			B

Answer Options			
Options A	**Options B**	**Options C**	**Options D**
990	980	970	880

12	5_29 Mathematics 11400	Playing with numbers	At any time, the SUM OF THE DIGITS displayed can be calculated. For example, the sum of the digits at 1:25 is 1 + 2 + 5 = 8. At 11:45, it is 1 + 1 + 4 + 5 = 11. At what time will the sum of the digits in the time displayed be MAXIMUM?			D

Answer Options			
Options A	**Options B**	**Options C**	**Options D**
12:00	11:59	10:59	09:59

13	5_29 Mathematics 11401	Playing with numbers	At 1:01, 2:22, 3:53, etc. the time reads the same FORWARDS as well as BACKWARDS. From 12:00 noon to 11:59 pm, how many times will the clock show a time reading the same backwards and forwards? (The clock does not display a zero before hours that do not require it, hence 1:01 should be counted, while 1:10 should not.)			C

Answer Options			
Options A	**Options B**	**Options C**	**Options D**
12	24	57	71

14	5_26 Mathematics 1665	Playing with numbers	-8 - (-4) &divided by (-2) is equal to		C

Answer Options			
Options A	**Options B**	**Options C**	**Options D**
-10	-6	2	6

15	5_29 & 11798	**Playing with numbers**	What is the quotient and remainder when 7799 is divided by 19?		D

Answer Options			
Options A	**Options B**	**Options C**	**Options D**
Quotient = 41, Remainder = 0	Quotient = 41, Remainder = 9	Quotient = 41.4, Remainder = 14	Quotient = 410, Remainder = 9