ESTD. 2000 Reg. No.: S000176

NAVPRAYAS
(A GROUP OF INNOVATIVE THOUGHTS)

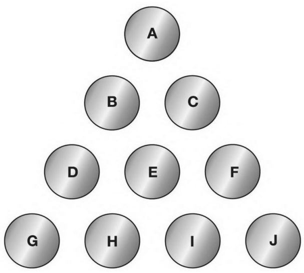
Junior Sample Paper (VII-VIII)
Questions

1.Which number is the odd one out?

1) 32418
2) 47631
3) 36119
4) 67626

2.How can a man who shaves several times a day still has a long beard?

3.Ten coins have been laid out in a triangle thus:



How can you make the triangle point downward by moving only three coins?

4.Find out what the missing number should be?

65		45			
				23	
	52		?		

5.What word becomes longer after you add two letters to it?

6. A girl found that she had a 56 cm strip of ribbon. She could cut a cm off every second. How long would it take for her to cut 56 pieces? She can not fold the strip and also, can not stack two or more strips and cut them together.

7. The grid below follows a certain logic in each row that is the same for all rows. What is the missing number?

9	4	9
3	6	9
2	5	?
6	8	12
8	9	9

8.Which letter comes in “?”

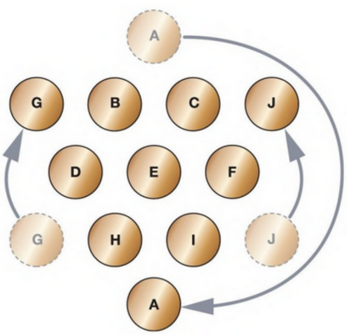
9.Which number multiplied by itself will give the output as 12345678987654321?

10.I have got some cookies and some cousins. If I distribute 4 cookies to each cousin, 1 of my cousins will get no cookies. If I distribute 3 cookies to each cousin, I will have one cookie left with me. How many cookies and cousins do I have?

Solutions

1. Option (2)
All the others are three-digit numbers followed by their square root, e.g. 361 followed by its square root, 19.

2. He is a barber.
3.



4. 32.

Each number is simply its position on the grid defined by row and column, but counting from the right. So 45 is column 4 counting from the right, and row 5, counting from the bottom.

5. The word “Long”.

6. To get 56 pieces, the girl will have to put only 55 cuts. i.e. she can cut 56 pieces in 55 seconds.

7. 1

9 x 4 = 36; 3 + 6 = 9

3 x 6 = 18; 1 + 8 = 9

6 x 8 = 48; 4 + 8 = 12

9 x 8 = 72; 7 + 2 = 9

Following this sequence,

2 x 5 = 10; 1 + 0 = 1

8. L

Here the letters follow the rule (AxZ)+(A+Z)

The number corresponding to the letters are used in the rule

A=1, Z=26 => 26x1 + 1 + 26 = 26+27 = 53 = 053

(LxP)+(L+P) = (12 x 16) + 12 + 16 = 192+28 = 220

Similarly (11x12) + 11 + 12 => 132 + 23 = 155

9. 11*11 = 121

111*111 = 12321

1111*1111 = 1234321

Similarly,

111111111*111111111 = 12345678987654321

10. Let J be total numbers of cousins and P be total numbers of cookies I have.

Eqn.1 4(J-1)=P

Eqn.2 3J=P-1

Solving the both equations we will get J=5 and P=16

ANSWER: I have 5 cousins and 16 cookies in total.