

SAMPLE QUESTIONS FOR MATHEMATICS COMPETITION

AGE CATEGORY: LITTLE BEE (9-11 Years old)

Question 1 (2 marks)

Which of the following statements is false?

Α	В	С	D
42 is a multiple of 2	43 is a multiple of 3	44 is a multiple of 4	45 is a multiple of 5

Question 2 (3 marks)

XYZ5 is a four-digit number.

Given that XYZ5 \times 3 = 28XYZ, find the value of X + Y + Z.

Α	В	С	D
16	20	28	30

Question 3 (2 marks)

Two three-digit numbers are added:

Calculate the value of x + y + z.

Α	В	С	D
17	19	21	22

Question 4 (3 marks)

The area of a square is twice its perimeter. Find the length of a side of the square.

Α	В	С	D
2	4	5	8

Question 5 (3 marks)

Each letter has a different numerical value between 1 and 6. Find the value of CRAB.

Α	В	С	D
10	12	13	14

Question 6 (5 marks)

How many rectangles are there in the diagram below?



Α	В	С	D
32	27	21	18

Question 7 (5 marks)

The points A, B, E and F and points B, C, D and E form the vertices of two squares, as shown in the image below.

How many different right-angled triangles can be drawn by connecting three dots in the image below?

F E D

 $\stackrel{\bullet}{A}$ $\stackrel{\bullet}{B}$ $\stackrel{\bullet}{C}$

Α	В	С	D
6	8	10	12

Question 8 (5 marks) Figure 2 is 9cm long. Figure 7 is 24cm long. How long is figure 70? C D Α В 213 221 232 245 Question 9 (5 marks) A sheet of paper is 0.01 mm thick. It is folded ten times. How thick is the paper after being folded ten times? Α C В D 1.28 mm 2.56 mm 5.12 mm 10.24 mm Question 10 (5 marks) Which number fits into the pattern below? 4 8 20 164 X Α В C D

48

56

38

40

Question 11 (3 marks)

Today is Friday. What day will it be in 40 days' time?

Α	В	С	D
Monday	Tuesday	Wednesday	Thursday

Question 12 (3 marks)

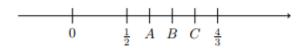
 $2701 \times 0.3 = 810.3$

What is the value of 270100×0.003 ?

Α	В	С	D
81030	8103	810.3	81.03

Question 14 (5 marks)

The distance between $\frac{1}{2}$ and $\frac{4}{3}$ is divided into four equal parts, as shown in the diagram below. Which number should come in the place of C?



Α	В	С	D	E
8 9	$\frac{3}{2}$	$\frac{22}{24}$	<u>9</u> 8	<u>5</u> 6

Question 15 (5 marks)

How many squares can be formed from the diagram below?

Α	В	С	D	E
5	7	9	11	None of these

Question 16 (6 marks)

Determine the result of the following calculation:

$$2018 - 2017 + 2016 - 2015 + 2014 - 2013 + \dots + 4 - 3 + 2 - 1$$

Α	В	С	D	E
0	-1	1	-1009	1009

Question 17 (5 marks)

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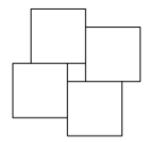
Question 18 (6 marks)

In a football match, the winning team receives three points, the losing team scores no point, and if the match results in a draw, then each team gets one point. A team has achieved 80 points after 38 games. What is the greatest number of games this team could have lost?

Α	В	С	D	E
9	10	11	12	13

Question 19 (6 marks)

The figure below shows four equal squares and one small square, with the total area of 333 cm². What is the area of the small square? (Hint: All lengths are integers).



Α	В	С	D	E
1 cm ²	4 cm ²	9 cm²	16 cm²	25 cm ²

Question 20 (5 marks)

Jeremy wants to know how old his father is. His father says to him: "Subtract from my age the half of your age. The answer to this is five times half of your age". Given this, how many times is the father older than Jeremy?

Α	В	С	D
Twice	Three times	Four times	Five times