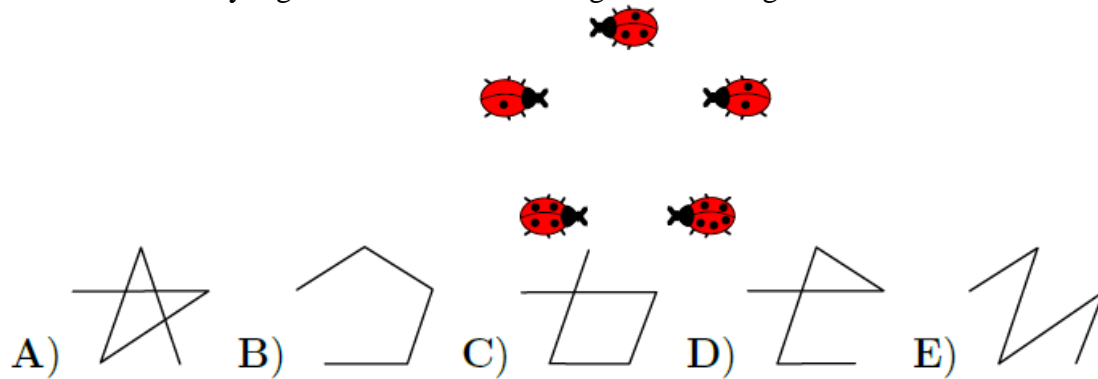


Math Kangaroo 2018 Sample Questions

LEVELS 1 AND 2

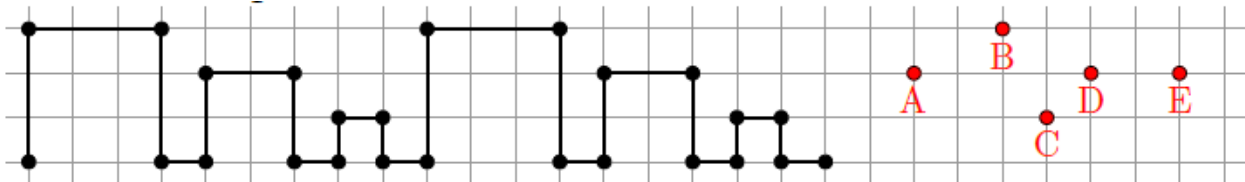
SAMPLE QUESTION FOR 3 POINTS

Alice draws a figure connecting all the ladybugs in the order of increasing number of dots. She starts with the ladybug with one dot. Which figure will she get?



SAMPLE QUESTION FOR 4 POINTS

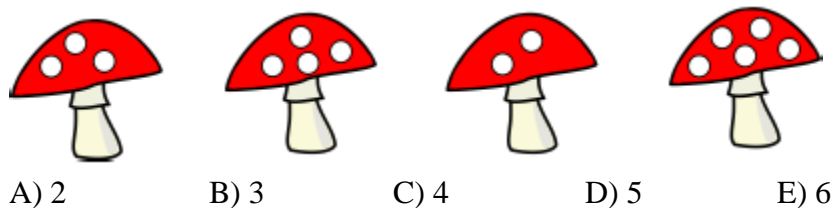
Peter drew a pattern twice, as in the picture. Which point will he reach when he draws the third pattern?



- A) A B) B C) C D) D E) E

SAMPLE QUESTION FOR 5 POINTS

The number of dwarfs that can fit under a mushroom is equal to the number of dots on the mushroom cap. The picture below shows one side of each mushroom. The number of dots on the other side is the same. If 30 dwarfs are seeking shelter from the rain, how many dwarfs will get wet?

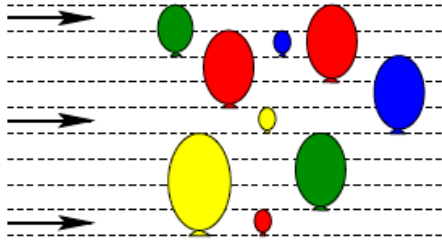


Math Kangaroo 2018 Sample Questions

LEVELS 3 AND 4

SAMPLE QUESTION FOR 3 POINTS

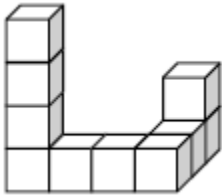
The picture shows 3 arrows that are flying and 9 balloons that can't move. When an arrow hits a balloon, the balloon pops, and the arrow keeps flying in the same direction. How many balloons will be hit by the flying arrows?



- A) 2 B) 3 C) 4 D) 5 E) 6

SAMPLE QUESTION FOR 4 POINTS

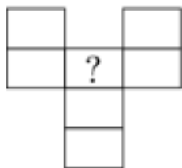
Toby glues 10 cubes together to make the structure shown to the right. He paints the whole structure, even the bottom. How many cubes are painted on exactly 4 of their faces?



- A) 6 B) 7 C) 8 D) 9 E) 10

SAMPLE QUESTION FOR 5 POINTS

Leon wants to write the numbers from 1 to 7 in the grid shown. Two consecutive numbers cannot be written in two neighboring cells. Neighboring cells are those that meet at the edge or at a corner. What numbers can he write in the cell marked with the question mark?



- A) all seven numbers
B) all of the odd numbers
C) all of the even numbers
D) only the number 4
E) only the numbers 1 or 7

Math Kangaroo 2018 Sample Questions

LEVELS 5 AND 6

SAMPLE QUESTION FOR 3 POINTS

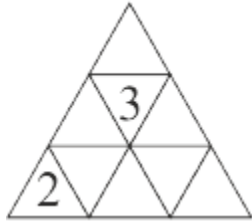
Alice subtracted two 2-digit numbers. Then she painted two cells. What is the sum of the two digits in the painted cells?

$$\blacksquare 3 - \blacksquare 2 = 25$$

- A) 8 B) 9 C) 12 D) 13 E) 15

SAMPLE QUESTION FOR 4 POINTS

Emily wants to enter a number into each cell of the triangular table. The sum of the numbers in any two cells with a common edge must be the same. She has already entered two numbers. What is the sum of all the numbers in the table?



- A) 18 B) 20 C) 21 D) 22 E) impossible to determine

SAMPLE QUESTION FOR 5 POINTS

Five balls, A, B, C, D, and E, weigh 30 g, 50 g, 50 g, 50 g, and 80 g each, not necessarily in that order. Which ball weighs 30 g?



- A) A B) B C) C D) D E) E

Math Kangaroo 2018 Sample Questions

LEVELS 7 AND 8

SAMPLE QUESTION FOR 3 POINTS

When the letters of the word MAMA are written vertically above one another, the word has a vertical line of symmetry. Which of these words also has a vertical line of symmetry when written in the same way?



- A) ROOT B) BOOM C) BOOT D) LOOT E) TOOT

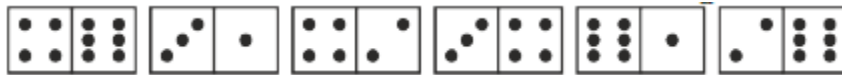
SAMPLE QUESTION FOR 4 POINTS

A rectangle is divided into 40 identical squares. The rectangle contains more than one row of squares. Andrew found the middle row of squares and colored it in. How many squares did he not color?

- A) 20 B) 30 C) 32 D) 35 E) 39

SAMPLE QUESTION FOR 5 POINTS

Domino tiles are said to be arranged correctly if the number of dots at the ends that touch are the same. Peter laid six dominoes in a line as shown in the diagram. He can make a move by either swapping the position of any two dominoes or by rotating one domino. What is the smallest number of moves he needs to make to arrange all the tiles correctly?



- A) 1 B) 2 C) 3 D) 4 E) It is impossible to do.