



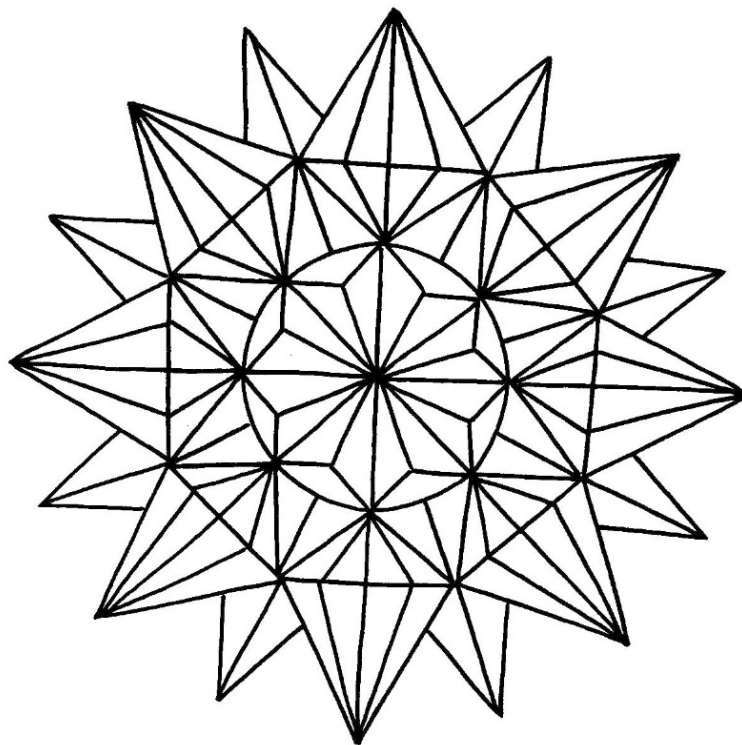
ST STITHIANS
BOYS' COLLEGE



Tour de Maths

IBSC Annual Conference 2023

Question Paper



5 Mark Questions

[20]

Question 1

George must number the 100 room doors of a new hotel with plastic number digits, from room 1 to room 100. How many 5s does he need?

Question 2

There were 5 cars in race. The blue car finished in front of the green car. The yellow car was behind the green car. The red car was between the blue and green cars. The orange car was in front of the blue car. What was the order of the cars from first to last?

- A: Yellow, green, red, blue, orange
- B: Blue, orange, red, green, yellow
- C: Orange, blue, red, green, yellow
- D: Orange, blue, green, red, yellow

Question 3

Given the digits 1, 2, and 3: how many different 3-digit numbers can be made without repeating any digits?

For example, 123 is such a number but 122 is not.

Question 4

A freight train 1 km long is travelling at a constant speed of 20 km/hour. It enters a tunnel 1 km long at 1:00 p.m. At what time does the rear of the train emerge from the tunnel?

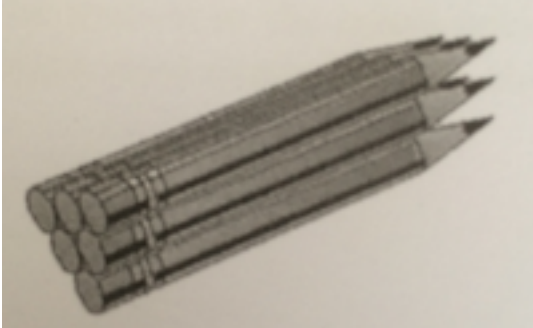
- A: 1.06 p.m.
- B: 1.03 p.m.
- C: 1.02 p.m.
- D: 1.04 p.m.

10 Mark Questions

[20]

Question 5

The picture below shows a triangular pile of pencils. There are 3 pencils in the bottom row and 6 pencils in the pile altogether. How many pencils will there be in a similar pile that has 18 pencils in the bottom row?



Question 6

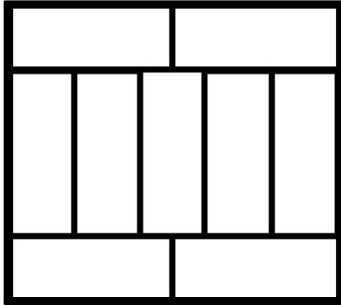
Tasneem was going to buy eight sweets at the tuckshop but it turned out she was \$7 short. Instead, she only buys seven sweets and is left with \$5 to spare. How much did a single sweet cost if all the sweets she bought cost the same?

20 Mark Questions

[40]

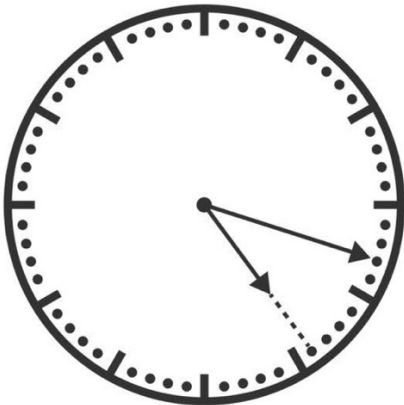
Question 7

In the diagram, a large rectangle is made up of nine small identical rectangles whose longest sides are 10cm long. What is the perimeter of the large rectangle?



Question 8

A clock with no numbers fell to the ground. What time is it?



Total: 80