



**NAME:**

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**PLEASE NOTE:**

- Questions must be answered on the question paper in the blocks provided.
- The teacher may explain the instructions to the learners.
- You may **not** use a calculator.
- Learners may write as individuals or pairs.
- Learners must print their names on the top of this paper.
- Have fun!

**CASIO**



**Please circle the correct letter for questions 1-10 and fill the answers in the blocks provided for questions 11-25. Each question is worth 1 mark unless stated otherwise.**

1) Calculate

$$1042 + 69$$

- a) 1081      b) 1091      c) 1101      d) 1111      e) 1121

2) Find the 8<sup>th</sup> number in the sequence 1; 4; 7; 10; 13; .....

- a) 28      b) 22      c) 32      d) 31      e) 29

3) Which is the greatest number?

- a) 0,075      b) 0,705      c) 0,750      d) 7,500      e) 7,050

4) The president of Mathsville is elected every 7 years and the prime minister is elected every 3 years. They are both elected in 2006. Which is the next year in which they will both be elected?

- a) 2016      b) 2014      c) 2021      d) 2027      e) 2031

5) An old bicycle wheel has 21 spokes, how many spaces are there in between them?

- a) 19      b) 20      c) 21      d) 22      e) 23

6) Which of the numbers below is a prime number?

- a) 27      b) 51      c) 52      d) 81      e) 71

7) The sum of two numbers is 18. Which of the choices below **cannot** be a possible product of these two numbers?

- a) 60      b) 17      c) 65      d) 32      e) 77

8) A storage bin is one-third full of sand. After 100 kg of sand is poured into the bin, it is half full. How much sand could the storage bin hold?

- a) 100 kg      b) 300 kg      c) 600 kg      d) 900 kg      e) 1200 kg

9) The 4-digit number 1CC7 is divisible by 9. What digit does C represent?

- a) 5      b) 6      c) 7      d) 8      e) 9

10) 12 monkeys take 12 minutes to eat 12 bananas (eating at the same rate). How many minutes would it take 6 monkeys to eat 6 bananas?

- a) 6      b) 8      c) 10      d) 12      e) 14

11) Which two-digit number is three times the sum of its digits?

12) The number of people with the flu, in a small town, doubles every 2 weeks.

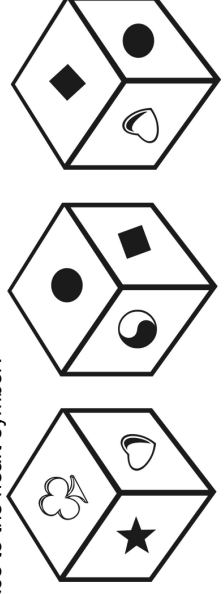
After 10 weeks, everyone in the town has the flu. After how many weeks did one quarter of the town have the flu?

13) A pen and pencil cost R12.00 together. If the pen costs R4.00 more than the pencil, how much does the pencil cost?

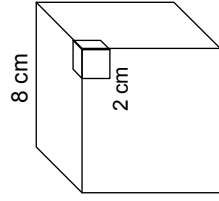
14) If the pattern in the table is continued, what number should replace Q?

1	2	3	4	5	6
3	8	14	21	29	Q

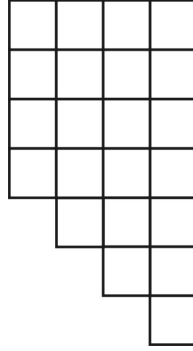
15) Using the 3 different views of the same cube to determine the symbol on the opposite face to the heart symbol?



16) How many of the small cubes fit exactly into the large cube?




17) How many squares are in the diagram below?




18) Which two-dimensional shape has an infinite number of lines of symmetry?

19) What number comes next in the number pattern below?

2;  $1\frac{1}{2}$ ;  $1\frac{1}{4}$ ; ?

20) If

$$2^1 = 2$$

$$2^2 = 2 \times 2 = 4$$

$$2^3 = 2 \times 2 \times 2 = 8$$

**Calculate:**  $6^6 \div 6^4$

21)  $\otimes$  is an alien maths operation. Below are examples of sums with their results.

$$2 \otimes 5 = 21$$

$$3 \otimes 5 = 24$$

$$1 \otimes 6 = 21$$

$$6 \otimes 9 = 45$$

What is the result of  $6 \otimes 6$  ?

22) Calculate the following  $100 - 99 + 98 - 97 \dots \dots 5 + 4 - 3 + 2 - 1 = ?$

23) At a football match the final score was 3-3. How many different half-time scores were possible?

24) If  $5 \nabla 2 = (5 \times 5) + (2 \times 2)$ , calculate  $(3 \nabla 1) \nabla 2$

25)  $3\frac{1}{2} \spadesuit = 4\frac{1}{2} \heartsuit$  and  $3 \clubsuit = 2 \heartsuit$ .

How many  $\clubsuit$  do you need to equal  $14 \spadesuit$  ?

Paper written by Steve Sherman

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