



Annual Examinations for Middle Schools 2022

YEAR 8

**MATHEMATICS
NON-CALCULATOR PAPER**

TIME: 30 minutes

Question	1	2	3	4	5	6	Total
Mark							

DO NOT WRITE ABOVE THIS LINE

Name: _____ Class: _____

Instructions to Candidates

- **Answer ALL questions.**
- **This paper carries a total of 25 marks.**
- **Calculators and protractors are NOT ALLOWED.**
- **All necessary working must be shown.**

1. Put these numbers in order of size, **smallest** first:

465, 4.65, 4650, 0.465, 46.5

_____ , _____ , _____ , _____ , _____

(2 marks)

2. From this set of numbers 1, 2, 3, 4, 5, 12, 16, 17, 18 write down:

a) all the multiples of 3 _____ , _____ , _____

b) all the prime numbers _____ , _____ , _____ , _____

c) the common multiples of both 2 and 3 _____ , _____

(3 marks)

3. a) A shop buys a stock of 500 batteries. 3% are damaged.
Find the number of damaged batteries.

Ans: _____ batteries

- b) The manager throws away the damaged batteries.
The rest are packed in bags, each containing 5 batteries.
How many bags of batteries does this store have for sale?

Ans: _____ bags

- c) The manager bought the batteries at €0.10 each. He sells them in bags at €1 per bag. If the shop sells all the bags of batteries, calculate the profit made.

Ans: € _____

(5 marks)

4. Find the value of the angles marked a and b .

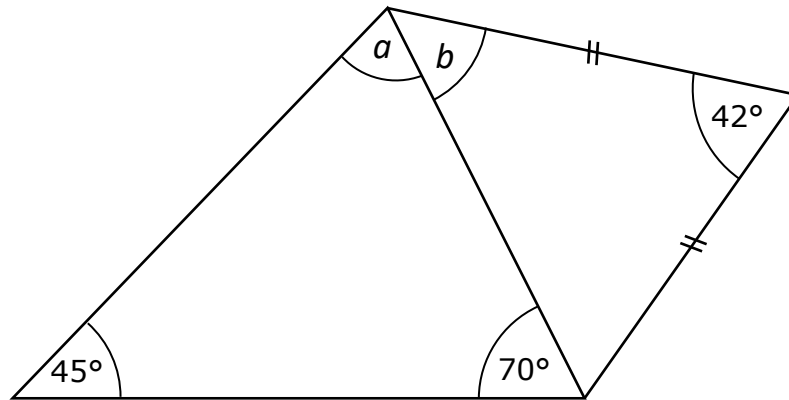


Diagram not drawn to scale

Ans: $a =$ _____ °

Ans: $b =$ _____ °

(3 marks)

5. Calculate the **surface area** of this shape.

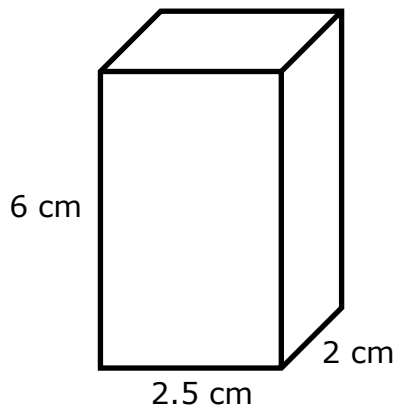


Diagram not drawn to scale

Ans: _____ cm^2

(4 marks)

6. For each of the following statements, choose the correct answer from the circles below. Write your answer in the space provided in the table.

2	$\frac{3}{5}$	$\frac{1}{8}$	0.25	$1\frac{3}{10}$
80%	0.3	4	$\frac{9}{15}$	30%

a)	Two equivalent fractions	_____ and _____
b)	A decimal and a percentage that are equal	_____ and _____
c)	The cube root of 8	_____
d)	Work out: $1\frac{9}{10} - \frac{3}{5}$	_____
e)	Work out: $2\frac{3}{4} \times \frac{1}{22}$	_____
f)	Work out: $6 \div 1\frac{1}{2}$	_____

(8 marks)

End of Non-Calculator Paper