Examination for the Enlistment of Soldiers in the Armed Forces of Malta (Regular Force) 2025

Subject: Mathematics

Date: 12th September 2025

Time: 09.00 – 10.30 (One and a half hours)

Instructions to candidates:

- This examination paper consists of THREE sections: A, B and C. Answer all 50 questions in these sections.

- Each question contains four possible answers, but only ONE is correct.

- It is recommended that candidates mark ONLY the correct answer initially in pencil to allow for any potential changes in answers. Candidates are then requested to mark the final answer in black or blue ink.

  e.g. If answer C is selected, fill in the appropriate circle as shown below.

50.	Ⓐ Ⓑ ● Ⓓ

- Each question carries two (2) marks.

- Diagrams are NOT drawn to scale.

- The use of calculators is allowed.

Section A

This section contains twenty (20) questions (from 1 to 20).
Answer ALL questions.

1	Which number is NOT a prime number?

A) 1   B) 11   C) 17   D) 31

2	Sixty-four can be written as:

A) 21 × 3   B) 120 ÷ 4   C) $2^2 \times 15$ D) 4^3

3	What is 218.647 correct to 2 decimal places?

A) 220.00   B) 218.65   C) 218.64   D) 219.00

4	Simplify the following ratio:

$$32 : 48$$

A) $2 : 3$ B) $3 : 2$ C) $1 : 3$ D) $3 : 4$

5	Jeff earns €1800. He spends $\frac{5}{8}$ of his earnings. How much does he spend?

A) €225   B) €900   C) €1125   D) €9000

6	The first 5 terms of a sequence are x, 74, 65, 56 and 47. What is the value of x?

A) 70   B) 76   C) 80   D) 83

7	The interior angles of a quadrilateral add up to:

A) 100°   B) 180°   C) 360°   D) 540°

8	0.65 is the same as:

A) 0.65%   B) 6.5%   C) $\frac{13}{20}$ D) $\frac{65}{10}$

9   Which one of the following statements is TRUE?

A) 2.289 > 2.829

B) 7.518 < 7.52

C) 5.25 < 4.95

D) 3.78 < 3.682

---

10 The following are the highest temperatures (°C) recorded each day in a week.

Day	Mon	Tue	Wed	Thu	Fri	Sat	Sun
Temp. in °C	20.1	18.6	19.2	21.5	21.5	23.4	22.4

Calculate the range of temperatures for this week.

A) 21.5 °C   B) 21 °C   C) 19.2 °C   D) 4.8 °C

---

11 Work out 35% of 12 000 g.

A) 350 g   B) 1200 g   C) 3500 g   D) 4200 g

---

12 Simplify: $9x + 8 - 7x - 3 + 2x$

A) $4x + 5$ B) $2x - 11$ C) $4x - 5$ D) $16x + 11$

---

13 Calculate the size of angle x.
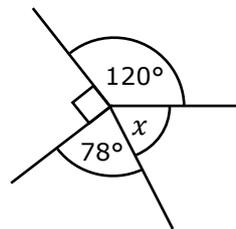
A) 60°   B) 68°   C) 72°   D) 90°

---

14 A box of 24 pens costs €30. What is the cost of six pens?

A) €6   B) €7.50   C) €12   A) €15

15 Julia makes a necklace using beads.

$\frac{1}{6}$ of the beads are red and $\frac{3}{4}$ of the beads are white. The rest are blue.

What fraction of the beads are blue?

A) $\frac{4}{10}$ B) $\frac{1}{12}$ C) $\frac{4}{12}$ D) $\frac{2}{3}$

16 Solve: $8x - 11 = 45$

A) 4.25 B) 6 C) 7 D) 8

17 A piece of cheese, weighing 150 g, contains 18 g of fat.
What percentage of the cheese is fat?

A) 9% B) 12% C) 18% D) 24%

18 Jacob starts work at 07:45. He spends 8 hours and 45 minutes at work.
At what time does he finish work?

A) 04:30 B) 06:30 C) 15:30 D) 16:30

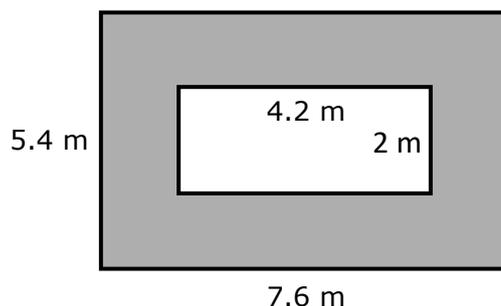**19** Kyle is driving at a constant speed of 20 metres per second. What distance does he travel in 15 minutes?

A) 1200 m B) 1.2 km C) 1.8 km D) 18 km

20 Work out the area of the rectangular frame, shown shaded below.

5.4 m

4.2 m

2 m

7.6 m

A) 41.04 m² B) 32.64 m² C) 49.44 m² D) 38.4 m²

20 x 2 marks = **40 marks**

This section contains twenty (20) questions (from 21 to 40).
Answer ALL questions.

21	Round 7385 m to the nearest 100 m.

A) 7000 m   B) 7400 m   C) 7390 m   D) 7300 m

---

22 Complete the sequence: $5\frac{2}{3}$, 6, $6\frac{1}{3}$, $6\frac{2}{3}$, _____ , _____

A) 7, $7\frac{1}{3}$ B) $7\frac{1}{3}$, $7\frac{2}{3}$ C) $6\frac{3}{4}$, 7   D) $6\frac{1}{3}$, 6

---

23 Work out the following, giving your answer correct to 1 decimal place:

$$\frac{9.52 + 3.85}{4.8 \times 2.3}$$

A) 11.4   B) 1.2   C) 4.5   D) 3.7

---

24 The capacity of a tank is 400 litres. Water flows into the tank at a rate of 1.6 litres per minute. How many minutes does it take to fill the tank?

A) 240 minutes   B) 4 minutes   C) 25 minutes   D) 250 minutes

---

25 A garbage truck has a total mass of $9\frac{3}{4}$ tons when full.

After dumping the garbage, the truck has a mass of $3\frac{5}{8}$ tons.

What is the mass of the garbage dumped?

A) $6\frac{2}{4}$ B) $6\frac{2}{8}$ C) $6\frac{1}{8}$ D) $6\frac{3}{4}$

---

26 Convert $10\frac{1}{5}\%$ to a decimal.

A) 0.102   B) 10.2   C) 51.1   D) 10.02

---

27 Which one of the following statements is TRUE?

A) $b = 180 - 2a$

B) $b = 360 - \frac{a}{2}$

C) $b = \frac{1}{2}(360 - a)$

D) $b = \frac{1}{2}(180 - a)$
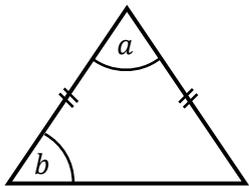
28	Work out: $\dfrac{24}{27} \times \dfrac{45}{32}$			
	A) $\dfrac{5}{8}$	B) $\dfrac{4}{5}$	C) $\dfrac{5}{9}$	D) $1\dfrac{1}{4}$

29	A concert is 1 hour 45 minutes long and finishes at 10:50 p.m. Shania arrived 15 minutes late for the concert. At what time did Shania arrive?
	A) 08:50 p.m. B) 9:20 p.m. C) 10:05 p.m. D) 10:15 p.m.

30	84 is a multiple of:
	A) 2, 6, 7 and 8
	B) 4, 5, 6 and 8
	C) 2, 3, 6 and 7
	D) 3, 4, 7 and 9

31	Express 20 mm as a percentage of 20 cm.
	A) 10% B) 20% C) 40% D) 100%

32	The number of elastic bands in three different packets are 243, 259 and 248 bands. Calculate the mean number of elastic bands in each packet.
	A) 248 B) 250 C) 375 D) 16

33	A map has a scale of 1 cm : 5 km. Calculate the distance represented on the map if the actual distance is 17 km.
	A) 3.4 cm B) 1.7 cm C) 2.9 cm D) 34 cm

34	Work out the value of A when $p = 3$ and $q = 4$ given that $A = 5p - 4q$.
	A) -1 B) 1 C) 8 D) 12

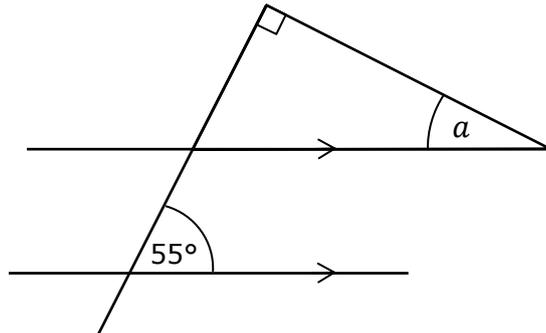| 35	Six months ago, a smart watch cost €168. The same smart watch now costs 8% less. What is the cost of the smart watch now?
	A) €13.44 B) €154.56 C) €155.56 D) €181.44

36 Estimate the circumference of a circle of diameter 9.8 cm.

9.8 cm
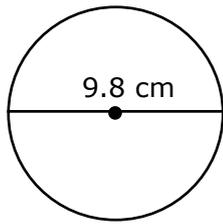
A) 10 cm   B) 20 cm   C) 30 cm   D) 50 cm

37 Work out the size of angle a.

A) 20°

B) 55°

C) 125°

D) 35°

a

55°

38 Sam is paid at a standard rate of €14 per hour during normal working
hours. Overtime is paid at 1.5 times the standard rate.
This week he worked 13 hours of overtime.
How much is Sam paid for this week's overtime?

A) €122   B) €182   C) €273   D) €455

39 Find two common factors of 198 and 286.

A) 11 and 2   B) 11 and 9   C) 13 and 2   D) 3 and 2

40 Antida buys four mugs and six bowls. The mugs cost m euro each, while
the bowls cost b euro each. She gives a 50 euro note to the shopkeeper
and she receives C euro change.
Form an equation to find C in terms of m and b.

A) $C = 50 + 4m - 6b$

B) $C = 50 - 4m + 6b$

C) $C = 50 - 4m - 6b$

D) $C = 4m + 6b - 50$

20 x 2 marks = **40 marks**

Section C

This section contains ten (10) questions (from 41 to 50).
Answer ALL questions.

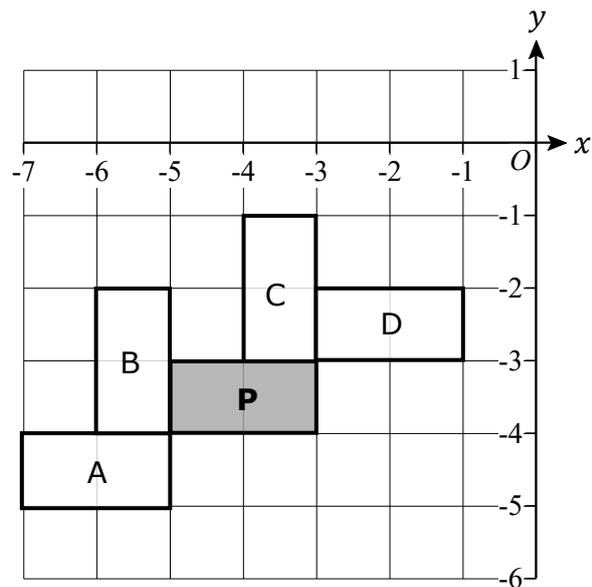|	
41	Make x the subject of the formula: $y = \frac{2x}{3a}$

A) $x = \frac{2y}{3a}$ B) $x = \frac{3ay}{2}$ C) $x = y - 6a$ D) $x = 3ay - 2$

---

42 Which shape is a 90° clockwise rotation of rectangle P about the point $(-3, -3)$?

A) Rectangle A   B) Rectangle B   C) Rectangle C   D) Rectangle D

---

43 A company employs 120 workers. The company will increase the number of its workers by 5%. How many workers will the company have after the increase?

A) 105   B) 125   C) 126   D) 180

---

44 The four vertical faces of this box are to be covered with decorative paper. Calculate the total area of decorative paper needed.
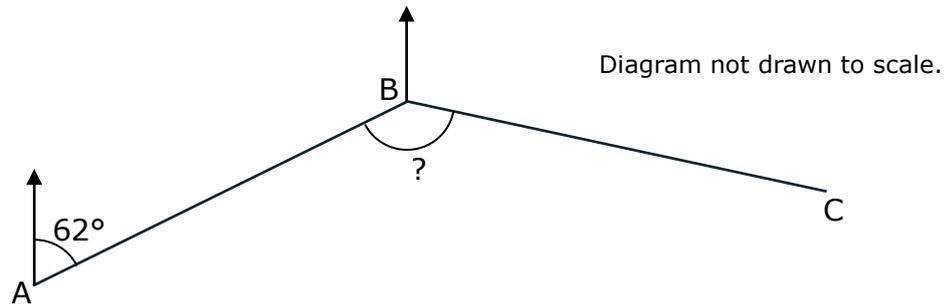
25 cm   50 cm   35 cm
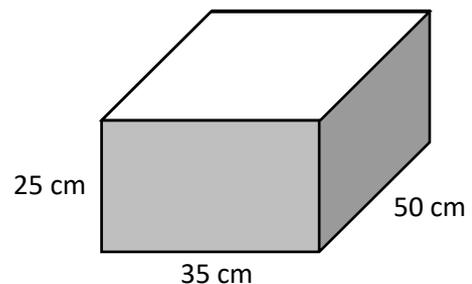
A) 7750 cm²   B) 4250 cm²   C) 1775 cm²   D) 2125 cm²

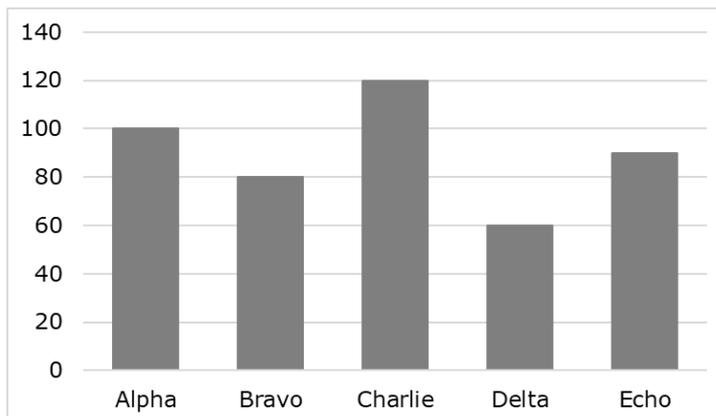**45** An aeroplane flies from A to B on a bearing of 062° from A. It then flies on a bearing of 100° from B. What is the size of angle ABC marked below?

Diagram not drawn to scale.

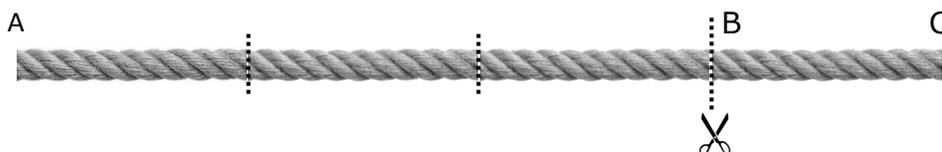

A) 142°   B) 162°   C) 182°   D) 202°

46 A military base has five units: Alpha, Bravo, Charlie, Delta and Echo. The graph shows the number of soldiers in each unit.

What is the median number of soldiers in each unit?

A) 60   B) 120   C) 80   D) 90

47 A rope AC is $15\frac{1}{2}$ m long. Amy divides the rope in four equal parts.

She cuts the rope at B. What is the length of rope AB?

A) 3.875 m   B) 7.75 m   C) 11.625 m   D) 12.5 m

48 In an academy there are 35 males and 40 females. Of the female members, 15 are left-handed. What is the probability that a person chosen at random from the academy is a right-handed female?

A) $\frac{1}{3}$ B) $\frac{3}{25}$ C) $\frac{5}{8}$ D) $\frac{3}{8}$

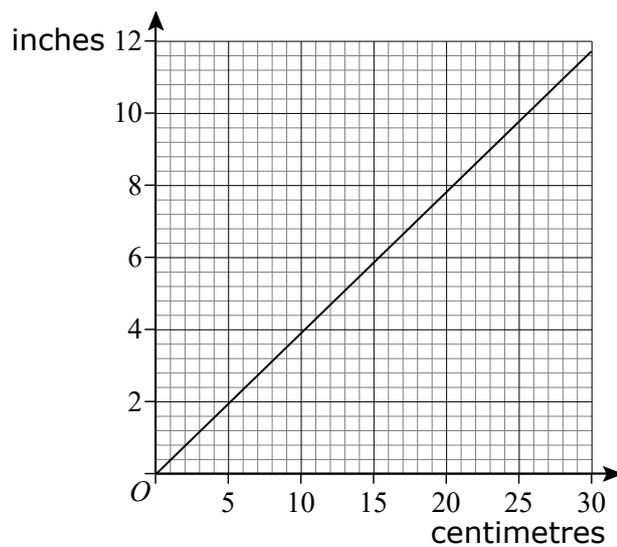49 €1 is equal to £0.85 and $1 is equal to £0.75.
Convert €1000 to dollars ($).

A) $637.50   B) $1133.33   C) $156.86   D) $1205.61

50 Use the graph to convert 18 inches to centimetres.

A) 42 cm   B) 48 cm   C) 44 cm   D) 46 cm

10 x 2 marks = **20 marks**

TOTAL: 100 MARKS

BLANK PAGE

BLANK PAGE