

Mathematics - S4 - 2024

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Answer Key (Explained Simply)

1. (a) $78 + 11$

- **Working Out:**
 - Ones place: $8 + 1 = 9$
 - Tens place: $7 + 1 = 8$
 - **Answer:** 89
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1. (b) $746 + 437$

- **Working Out:**
 - Add ones: $6 + 7 = 13$ (write 3, carry 1)
 - Add tens: $4 + 3 = 7$, plus carry 1 = 8
 - Add hundreds: $7 + 4 = 11$
 - **Answer:** 1,183
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1. (c) Write $300 + 60 + 5$ in short form

- Add them up: $300 + 60 = 360$; $360 + 5 = 365$
 - **Answer:** 365
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1. (d) Write 345 in expanded form

- Break down the digits:
 - 3 is in the hundreds place $\rightarrow 300$
 - 4 is in the tens place $\rightarrow 40$
 - 5 is in the ones place $\rightarrow 5$
 - **Answer:** $300 + 40 + 5$
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1. (e) Write XXV in Arabic numbers

- $XXV = 10 (X) + 10 (X) + 5 (V)$
- **Answer:** 25

2. (a) Next number in the sequence 1, 3, 5, 7, ____

- The numbers go up by 2 each time. After 7 comes $7 + 2 = 9$.
 - **Answer:** 9
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2. (b) Arrange these numbers from smallest to largest: 23, 12, 34, 21, 32, 43, 18

1. 12
 2. 18
 3. 21
 4. 23
 5. 32
 6. 34
 7. 43
- **Answer:** 12, 18, 21, 23, 32, 34, 43
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2. (c) Missing Roman number in the sequence: XII, XIV, XVI, ____, XX

- These Roman numerals jump by 2 in value:
 - XII = 12
 - XIV = 14
 - XVI = 16
 - Next should be 18 = XVIII
 - Then XX = 20
 - **Answer:** XVIII
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2. (d) Fill in the missing number: 998, 999, 1000, ____

- The sequence goes up by 1: $998 \rightarrow 999 \rightarrow 1000 \rightarrow 1001$
 - **Answer:** 1001
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2. (e) Nguvumali village maize harvest

They harvested maize for 5 years. Each year, harvest increased by 50 sacks. If the first year was 300 sacks, how many sacks were harvested in the fifth year?

- Year 1: 300 sacks
 - Year 2: $300 + 50 = 350$ sacks
 - Year 3: $350 + 50 = 400$ sacks
 - Year 4: $400 + 50 = 450$ sacks
 - Year 5: $450 + 50 = 500$ sacks
 - **Answer:** 500 sacks
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3. (a) Add sh. 2150 + sh. 950

- $2150 + 950 = 3100$
 - (You can also do: $2150 + 900 = 3050$, then $+50 = 3100$)
 - **Answer:** sh. 3,100
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3. (b) Multiply sh. 250×30

- $250 \times 30 = 250 \times (3 \times 10) = (250 \times 3) \times 10 = 750 \times 10 = 7,500$
 - **Answer:** sh. 7,500
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3. (c) Write the time indicated on the clock in words.

Looking at the clock face:

- The minute hand points to the **2** (each number around the clock is worth 5 minutes, so 2 = 10 minutes).
- The hour hand is just past the **10**.

So, the clock shows **10:10**.

Answer in words:

"It is ten minutes past ten."

3. (d) Write quarter to two in numerals.

- "Quarter to two" means 15 minutes before 2 o'clock.

- That is **1:45**.

Answer: 1:45

3. (e) Add 4 hours 30 minutes and 2 hours 45 minutes.

1. Add the hours: $4 + 2 = 6$
2. Add the minutes: $30 + 45 = 75$ minutes (which is 1 hour and 15 minutes)
3. Now add the extra hour to the hours: $6 + 1 = 7$ hours
4. Remainder minutes = 15 minutes

So the total is **7 hours 15 minutes**.

Answer: 7:15

4. (a) How many angles are there in a square?

A square has **4 corners**, so it has **4 angles**.

Answer: 4

4. (b) Draw a shape with three angles.

A shape with **three angles** is a **triangle**.



4. (c) Find the perimeter of the following square (each side = 14 cm).

Perimeter of a square = $4 \times (\text{side length})$

- Side = 14 cm
- Perimeter = $4 \times 14 = 56$ cm

Answer: 56 cm

4. (d) A dispensary room is a rectangle with a perimeter of 54 m. If its length is 17 m, find the width.

1. Perimeter of a rectangle = $2 \times (\text{Length} + \text{Width})$
2. So, $54 = 2 \times (17 + \text{Width})$
3. Divide both sides by 2: $54 \div 2 = 17 + \text{Width} \rightarrow 27 = 17 + \text{Width}$
4. Width = $27 - 17 = 10$ m

Answer: 10 m

4. (e) The perimeter of a triangle is 70 cm. If the first side is 24 cm and the second side is 25 cm, find the length of the third side.

1. Perimeter = sum of all three sides = 70
2. $24 + 25 = 49$
3. Third side = $70 - 49 = 21$ cm

Answer: 21 cm