

MATHEMATICS AND STATISTICS — 30 QUESTIONS

Multiple choice · 35 minutes

Work through the questions in order, but do not spend too long on any one. Mark your best answer for every question, then check your work against the worked solutions.

1. What is 100 more than 7618?

- A 7518
- B 7718
- C 8618
- D 7628

2. The map shows places in a town. What is in square A3?

	A	B	C	D	E
1	Pool				
2					Fire
3	Mall	Vet	Café		
4					

- A Pool
- B Vet
- C Café
- D Mall

3. What is the next number in this pattern? 58, 50, 42, 34, ...

- A 25
- B 26
- C 18
- D 42

THE WORKED ANSWERS TO THOSE 3 QUESTIONS

1. What is 100 more than 7618? [Place value]

Correct answer: B — 7718

- 100 more than 7618 is $7618 + 100$.
- $= 7718$.
- Why the other options are wrong:
 - A (7518): Went the wrong way: used less instead of more.
 - C (8618): Changed the wrong place: that is ten times the change.
 - D (7628): Changed the wrong place: that is a tenth of the change.

Skill: Place value

KEY TAKEAWAY

To add or subtract a power of ten, change only that one place value digit.

2. The map shows places in a town. What is in square A3? [Grid references]

	A	B	C	D	E
1	Pool				
2					Fire
3	Mall	Vet	Café		
4					

Correct answer: D — Mall

- Find column A along the top and row 3 down the side.
- The square A3 holds the Mall.
- Why the other options are wrong:

- A (Pool): That place is in square A1.
- B (Vet): That place is in square B3.
- C (Café): That place is in square C3.

Skill: Grid references

KEY TAKEAWAY

A grid reference is the column letter then the row number.

3. What is the next number in this pattern? 58, 50, 42, 34, ... [Patterns]

Correct answer: B — 26

- Look for the rule: subtract 8 each time.
- Next number: 26.
- Why the other options are wrong:
- A (25): Off by one.
- C (18): Subtracted the step twice.
- D (42): Went up instead of down.

Skill: Patterns

KEY TAKEAWAY

Find the rule that takes each term to the next, then apply it again.