

EduTest Year 9 Entry Practice Paper 1

Numerical Reasoning

50 questions · 5 options each (A–E) · 30 minutes · No calculator

How to use this booklet

- There are 50 questions in this section. For each question there are five possible answers, A, B, C, D and E. Choose the one correct answer.
- This is an ability test: it checks how well you spot patterns and reason with numbers, not formulas you have memorised. Work swiftly.
- Calculators are not allowed. You have 30 minutes. You will not lose marks for wrong answers, so attempt every question.

NUMERICAL REASONING — 50 QUESTIONS

Multiple choice · 30 minutes

Work through the questions in order. If a question stalls you, move on and come back. Then check your work against the worked solutions.

1. 45 is to 9 as 55 is to ____ .

- A 11
- B 13
- C 19
- D 12
- E 10

2. The temperature at noon is -4°C . It drops by 6 degrees by evening and then rises by 4 degrees overnight. What is the temperature then?

- A -5
- B 6
- C -14
- D -6
- E -7

3. In this number pyramid, each brick is the SUM of the two bricks directly below it. The bottom row is 10, 15, 15. What number goes at the top?

- A 56
- B 25
- C 54
- D 40
- E 55

4. The table shows how many passengers a ferry carried each trip. Each passenger pays \$6. What was the total fare revenue?

Trip	Passengers
Mon	9
Tue	11
Wed	26
Thu	35

- A 492
- B 486
- C 480
- D 81
- E 840

5. Which number does NOT belong with the others? 262, 324, 49, 400, 225

- A 262
- B 400
- C 49
- D 225
- E 324

6. What is the remainder when 281 is divided by 9?

- A 7
- B 2
- C 3
- D 31
- E 1

7. What is $24.3 \div 0.9$?

- A 27
- B 28
- C 270
- D 24.3
- E 2.7

NUMERICAL REASONING — 50 QUESTIONS

Answers & worked solutions

Answer Key

1	A	2	D	3	E	4	B	5	A	6	B
7	A	8	E	9	D	10	B	11	B	12	C
13	E	14	B	15	E	16	A	17	C	18	B
19	B	20	D	21	D	22	C	23	D	24	C
25	C	26	A	27	A	28	E	29	C	30	E
31	D	32	D	33	E	34	E	35	A	36	C
37	E	38	D	39	E	40	A	41	D	42	D
43	A	44	B	45	C	46	A	47	C	48	C
49	B	50	B								

1. 45 is to 9 as 55 is to ____ . [Analogies]

Correct answer: A — 11

- Compare 45 and 9: $45 \div 5 = 9$.
- The rule is $\div 5$.
- $55 \div 5 = 11$.
- Why the other options are wrong:
- B (13): Divide by exactly 5.
- C (19): The first pair divides; the gap isn't fixed.
- D (12): This is the correct answer (11) plus 1: an extra 1 was added at the end of the calculation (an off-by-1 error).
- E (10): This is the correct answer (11) minus 1: 1 was taken off at the end of the calculation (an off-by-1 error).

LOS: Numerical reasoning: [analogies]

KEY TAKEAWAY

A pair can shrink by a fixed factor: look for division as well as subtraction.

2. The temperature at noon is -4°C . It drops by 6 degrees by evening and then rises by 4 degrees overnight. What is the temperature then? [Negative numbers]

Correct answer: D — -6

- Start at -4 .
- Drop by 6: $-4 - 6 = -10$.
- Rise by 4: $-10 + 4 = -6$.