Answers and marking scheme

GL Maths Competitive Paper 01 · Maths · Year 5 (ages 9-10)

Total marks: 40. One mark per question unless shown. For written answers, accept any answer that matches the scheme in meaning.

Maths - competitive paper

Q	Answer	Topic	Explanation
1	E (8,849)	Rounding Up and Down	Numbers from 8,750 to 8,849 round to 8,800 to the nearest hundred. The largest is 8,849.
2	C (696 − 196)	Mixed Calculations	Work out each answer: 696 − 196 = 500, 65 + 471 = 536, 5 × 109 = 545, 2 × 239 = 478, 497 − 54 = 443. 500 is closest to 493.
3	C (300)	Displaying Data	Add all the values: 75 + 45 + 85 + 70 + 25 = 300.
4	C (56)	Ratio and Proportion	Each number in the first row is multiplied by 7. 8 × 7 = 56.
5	D (52 cm)	Shape Problems	Add the sides round the outside: 10 + 8 + 8 + 13 + 13 = 52 cm. The line where the triangle sits on the rectangle is inside the shape, so it is not counted twice.
6	A (2)	Mixed Calculations	1/5 of 65 = 13. Then 13 − 11 = 2.
7	C (5 cm)	2D Shapes	A rhombus has 4 equal sides. 20 ÷ 4 = 5 cm.
8	C (60°)	Angles	A full turn is 360°, so one-sixth of a turn is 60°.
9	D (70,328)	Place Value	Write each part in its place and use 0 as a placeholder for any empty place: 70,328.
10	B (20 cm)	Multiplication and Division	1/5 of 100: 100 ÷ 5 × 1 = 20.
11	B (23:00)	Time	21:05 + 1 hour 55 minutes = 23:00.
12	B (36)	Number Sequences	These are square numbers: 1^2, 2^2, ... The next is $6^2 = 36$.
13	E (1,200)	Area and Perimeter	3 m = 300 cm and 4 m = 400 cm. 30 tiles fit along one side and 40 along the other: 30 × 40 = 1200.
14	A (6)	Mixed Problems	2 kg = 2,000 g. 2,000 ÷ 300 = 6 remainder 200, so 6 whole loaves.
15	C (7/10)	Fractions, Percentages and Decimals	Write them all with the same denominator, 10: 1/5 = 2/10, 5/10 = 5/10, 2/5 = 4/10, 7/10 = 7/10, 6/10 = 6/10. The largest is 7/10.
16	C ((5, 7))	Coordinates	The image is the same distance from the mirror line on the other side: (5, 7).
17	B (50 dollars ($))	Analysing Data	Go across from 40 on the pounds (£) axis to the line, then down: 50 dollars ($).
18	D (2)	Number Knowledge	Factors of 12: 1, 2, 3, 4, 6, 12. Factors of 14: 1, 2, 7, 14. The largest they share is 2.
19	A ((9, 8))	Coordinates	The image is the same distance from the mirror line on the other side: (9, 8).

Q	Answer	Topic	Explanation
20	C (1)	3D Shapes	A pentagonal prism has 7 faces and a cuboid has 6. 7 − 6 = 1.
21	E	Symmetry	Counting lines of symmetry: A = 0, B = 4, C = 1, D = 1, E = 1.
22	A (0)	2D Shapes	Compare each corner inside the shape with 90° and 180°. There are 0 reflex angles.
23	C (9.2 × 100)	Multiplying and Dividing by 10, 100, 1000	Work each one out: 9.2 × 100 = 920; 82 ÷ 10 = 8.2; 0.3 × 10 = 3; 0.74 ÷ 10 = 0.074; 2.1 × 10 = 21. The largest is 920.
24	A (3)	Algebra	Add 3: 15 + 3 = 18. Then divide by 6: 18 ÷ 6 = 3.
25	B (34,000)	Addition and Subtraction	26,041 rounds to 26,000 and 8,274 rounds to 8,000. 26,000 + 8,000 = 34,000.
26	B (5 3/5)	Fractions, Percentages and Decimals	28 ÷ 5 = 5 remainder 3, so 28/5 = 5 and 3/5.
27	B (£12)	Mixed Problems	4 × £9 = £36 and 3 × £4 = £12. Total £48. Change £60 − £48 = £12.
28	E (£7.20)	Ratio and Proportion	One costs £1.80 ÷ 2 = 90p. So 8 cost 8 × 90p = £7.20.
29	E (52 m²)	Area and Perimeter	Outside area 11 × 6 = 66 m². The lawn is 7 m by 2 m = 14 m². Path = 66 − 14 = 52 m².
30	D (35)	Mixed Calculations	Work backwards using the opposite of each step, in reverse order: × 4, + 15, + 16. This gives 35.
31	E (588,390)	Place Value	five hundred and eighty-eight thousand three hundred and ninety is 588,390.
32	E (117)	Number Sequences	The sequence goes up by 10 each time. To get to term 10 we add 10 a total of 9 times: 27 + 9 × 10 = 117.
33	C (1)	Algebra	Replace each letter with its number: 3 − 2 = 1.
34	A (£5.25)	Units	350 cm = 3.5 m. £1.50 × 3.5 = £5.25.
35	C (75°)	Shape Problems	Angles at a point add up to 360°. 85° + 110° + 90° = 285°, and 360 − 285 = 75°.
36	A (20)	Data Tables	The total for Cricket is 42. 42 − 22 girls = 20 boys.
37	E (883)	Addition and Subtraction	1,000 − 117 = 883.
38	E (60 centimetres)	Analysing Data	Go up from 24 on the inches axis to the line, then across: 60 centimetres.
39	D (555)	Multiplication and Division	8 × 555 = 4,440, so 4,440 ÷ 8 = 555.
40	D (11:50 am)	Time	11:10 am + 40 minutes = 11:50 am.