

Maths End-of-Year Assessment

A 33-mark non-calculator paper across all four KS3 strands, with a revision priorities table.

Name _____ Date _____ Class _____

Learning objective: I can show what I have learned in KS3 maths this year and identify my revision priorities.

✓ I can work without a calculator ✓ I can show clear working ✓ I can identify revision priorities

Answer all questions in the spaces. Show your working. Calculators are **not** allowed. Total: **33 marks**. Time: about 50 minutes.

1 Number

- 1 Work out 4.6×100 . [1 mark]

- 2 Work out $\frac{3}{4} + \frac{1}{6}$. Give your answer in its simplest form. [2 marks]

- 3 Write 0.35 as a fraction in its simplest form. [1 mark]

- 4 Increase £60 by 20%. [2 marks]

- 5 Share £45 in the ratio 2 : 3. [2 marks]

- 6 Write 360 as a product of prime factors. [2 marks]

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2 Algebra

7 Simplify $5x \times 3y$. [1 mark]

8 Solve $5x - 7 = 2x + 8$. [2 marks]

9 Substitute $a = 4$ and $b = -2$ into $3a^2 + b$. [2 marks]

10 Factorise $6x + 15$. [1 mark]

11 Find the 20th term of the sequence with nth term $4n - 1$. [1 mark]

12 Make t the subject of $v = u + at$. [2 marks]

3 Geometry and measures

13 Find the area of a parallelogram with base 9 cm and perpendicular height 4 cm. [1 mark]

14 Find the interior angle of a regular hexagon. [2 marks]

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4 Geometry and measures (continued)

- 15 Find the area of a circle with radius 5 cm. Use $\pi = 3.14$. [2 marks]

- 16 A right-angled triangle has shorter sides 6 cm and 8 cm. Find the hypotenuse. [2 marks]

- 17 Convert 2.5 kilometres into metres. [1 mark]

5 Statistics and probability

- 18 For the data 12, 15, 15, 18, 20, find the mean and the range. [2 marks]

- 19 A bag has 3 red, 5 blue and 2 green counters. Find $P(\text{blue})$. [1 mark]

- 20 The probability that it rains tomorrow is 0.35. What is the probability that it does not rain? [1 mark]

- 21 In a pie chart of 60 people, 15 chose football. What angle is the football sector? [2 marks]

6 My revision priorities After marking, write your score for each strand.

Strand	Score	Out of
Number		10
Algebra		9
Geometry and measures		8
Statistics and probability		6

Answer Key

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Question	Answers
1 Number	1. 460 2. 11/12 3. 7/20 4. £72 5. £18 and £27 6. $2^3 \times 3^2 \times 5$
2 Algebra	7. 15xy 8. $x = 5$ 9. 46 10. $3(2x + 5)$ 11. 79 12. $t = (v - u) / a$
3 Geometry and measures	13. 36 cm ² 14. 120°
4 Geometry and measures (continued)	15. 78.5 cm ² 16. 10 cm 17. 2500 m
5 Statistics and probability	18. mean = 16, range = 8 19. 1/2 20. 0.65 21. 90°
6 My revision priorities	Number – Score: — Algebra – Score: — Geometry and measures – Score: — Statistics and probability – Score: —

Teaching note: total 33 marks. Award method marks for correct working even when the final answer is wrong.
 Prime factor form: $360 = 2 \times 2 \times 2 \times 3 \times 3 \times 5$.