MATHSTUTOR.ME · FREE RESOURCE FOR TEACHERS

KS2 SATs-style Practice

Paper 1 — Arithmetic

Time: 30 minutes

Marks: 40

Questions: 36

Calculator: Not permitted

Instructions for pupils

- Work through the questions in order — they get harder as you go.
- Write your answer in the box next to each question.
- You may use scrap paper or the space around the question for working.
- Questions 33–36 are worth **two marks each**; all others are worth **one mark**.
- If you get stuck, skip the question and come back to it.

Paper 1 — Arithmetic

Questions 1–16 · 1 mark each

1	34 + 57 = _____	**1 mark**	**2**	82 − 46 = _____	**1 mark**
3	7 × 8 = _____	**1 mark**	**4**	63 ÷ 9 = _____	**1 mark**
5	25 + 46 + 18 = _____	**1 mark**	**6**	100 − 37 = _____	**1 mark**
7	9 × 6 = _____	**1 mark**	**8**	72 ÷ 8 = _____	**1 mark**
9	345 + 267 = _____	**1 mark**	**10**	502 − 178 = _____	**1 mark**
11	24 × 6 = _____	**1 mark**	**12**	96 ÷ 4 = _____	**1 mark**
13	1,234 + 567 = _____	**1 mark**	**14**	5,000 − 1,276 = _____	**1 mark**
15	35 × 11 = _____	**1 mark**	**16**	156 ÷ 12 = _____	**1 mark**

Paper 1 — Arithmetic (continued)

Questions 17–32 · 1 mark each

17 $458 \times 7 =$ _____ **1 mark**

18 $864 \div 8 =$ _____ **1 mark**

19 $3.6 + 2.75 =$ _____ **1 mark**

20 $8.4 - 2.67 =$ _____ **1 mark**

21 $4.5 \times 3 =$ _____ **1 mark**

22 $7.2 \div 4 =$ _____ **1 mark**

23 $0.8 \times 0.5 =$ _____ **1 mark**

24 $12.6 \div 3 =$ _____ **1 mark**

25 $\frac{1}{2} + \frac{1}{4} =$ _____ **1 mark**

26 $\frac{2}{3} - \frac{1}{6} =$ _____ **1 mark**

27 $\frac{3}{4} \times 8 =$ _____ **1 mark**

28 25% of 80 = _____ **1 mark**

29 50% of 240 = _____ **1 mark**

30 10% of 1,500 = _____ **1 mark**

31 $(8 + 7) \times 4 =$ _____ **1 mark**

32 $100 - (20 \times 3) =$ _____ **1 mark**

Paper 1 — Arithmetic (continued)

Questions 33–36 · 2 marks each · Show your method for full marks

33 $1{,}248 \times 37 =$ _____ 2 marks

34 $9{,}072 \div 28 =$ _____ 2 marks

35 $3.78 \times 1.4 =$ _____ 2 marks

36 $\frac{3}{5} \times \frac{4}{9} =$ _____ 2 marks

Mark scheme

Accept equivalent forms unless otherwise noted. For 2-mark questions: 2 marks for a correct answer; 1 mark for a correct method with a single arithmetic slip (pupils must show working).

Q	Answer	Notes · accepts	Marks
Questions 1–16 (1 mark each, mental & short written methods)			
1	**91**	—	**1**
2	**36**	—	**1**
3	**56**	—	**1**
4	**7**	—	**1**
5	**89**	—	**1**
6	**63**	—	**1**
7	**54**	—	**1**
8	**9**	—	**1**
9	**612**	—	**1**
10	**324**	—	**1**
11	**144**	—	**1**
12	**24**	—	**1**
13	**1,801**	Accept 1801	**1**
14	**3,724**	Accept 3724	**1**
15	**385**	—	**1**
16	**13**	—	**1**
Questions 17–32 (1 mark each, formal written, decimals, fractions, percentages, order of operations)			
17	**3,206**	Accept 3206	**1**
18	**108**	—	**1**
19	**6.35**	—	**1**
20	**5.73**	—	**1**
21	**13.5**	Accept 13.50	**1**
22	**1.8**	Accept 1.80	**1**
23	**0.4**	Accept 0.40	**1**
24	**4.2**	Accept 4.20	**1**
25	**3/4**	Accept 0.75 or equivalent fraction	**1**
26	**1/2**	Accept 0.5 or any equivalent fraction (e.g. 3/6)	**1**
27	**6**	Accept 24/4, 6.0	**1**
28	**20**	—	**1**

Q	Answer	Notes · accepts	Marks
29	**120**	—	**1**
30	**150**	—	**1**
31	**60**	—	**1**
32	**40**	—	**1**

Questions 33–36 (2 marks each, long methods)

33	**46,176**	Accept 46176. Award 1 mark for a correct long-multiplication method with one arithmetic slip.	**2**
34	**324**	Award 1 mark for a correct long-division method with one arithmetic slip.	**2**
35	**5.292**	Accept 5.292 or equivalent. Award 1 mark for method with one slip.	**2**
36	**4/15**	Accept 12/45 before cancelling. Award 1 mark for a correct unsimplified product.	**2**

Total marks available: 40 · **Time limit:** 30 minutes · **Calculator:** not permitted.

Every answer in this mark scheme was verified by computer algebra (the SymPy library) before publication. If you spot an error, email **hello@mathstutor.me** — we reply within one working day.

Regenerate this pack from source by running `node build.mjs sats-pack` from the `tools/teacher-pdfs/` directory of the MathsTutor.me repository. See `docs/teachers/README.md` for full regeneration notes.