Multiplication and Division KS2 SATS Standard Worksheet Answers

1. 14 — 1

[1]

2. (a)

7	+	1	8	=	2	5		1

(b)

2	5	×	3	=	7	5		1 U1

[2]

3. 20 — 1

4. (a) 65 — 1m

(b) 8 — 1m

(c) 180 — 1m

[3]

5. (a) 7 — 1

(b) 2 — 1

If boxes are blank, Accept answers elsewhere on page, eg
19 – 12 = 7
25 – 2 = 23

[2]

6. 35 (ice-creams)

[1]

7. (a) 32 — 1

(b) 5 — 1

[2]

8. a $20 \times 4 = 80$

[1]

b $48 \div 2 = 24$

[1]

9. Award **TWO** marks for all three calculations completed correctly as shown: — Up to 2 marks

5 × **4**

12 ÷ **3**

9 + **5**

Answers to the calculations are not required for the award of the mark.

If the answer is incorrect, award **ONE** mark for two calculations completed correctly, eg

5 × **4**

12 ÷ 5

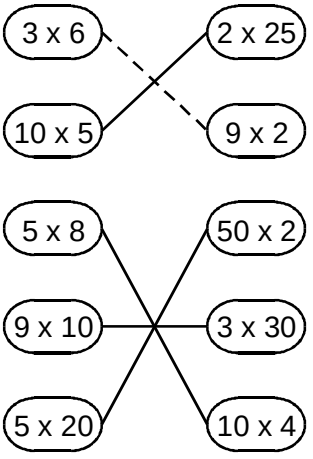
9 + 3

*Accept for **ONE** mark*

*4, 3, (*) **OR***
*4, (*), 5 **OR***
*4, (*), 3 **OR***
(*), 3, 5
where (*) is any number or blank.

[2]

10. Award TWO marks for the diagram completed correctly as shown. Up to 2m



If the answer is incorrect, award **ONE** mark for at least two lines correctly drawn.

Lines need not touch the boxes, provided the intention is clear.

***Do not** accept two or more lines emanating from the same left-hand box.*

[2]

11. 92 1

[1]

12. 60 ÷ 10 = 6 1

OR

60 ÷ 6 = 10
OR
6 = 60 ÷ 10
OR
10 = 60 ÷ 6

Award the mark if more than one correct answer is given.

[1]

13. (a) $4 \times 3 \times 2 + 1 = 25$ 1

Accept answers elsewhere on the page if circles are blank.
All must be correct.

(b) $4 \times 3 \times 2 - 1 = 23$ 1

All must be correct.
Accept answers elsewhere on the page if circles are blank.
All must be correct.

[2]

14. Any two numbers which multiplied together give 150, eg 1

10 × 15
30 × 5
25 × 6
150 × 1
7.5 × 20

[1]

15. 34 1

[1]

16. 18 456 1m

[1]

17. 8340 1m

[1]

18. 121 1m

[1]

19. 9 (boxes)

[1]

20.

	3	4	**2**
×			6
2	0	5	2

(a) 3 in left hand box 1m

(b) 2 in right hand box 1m

[2]

21. 3294 1

[1]

22. 12

[1]

23. Award **TWO** marks for the correct answer of 288 up to 2

If the answer is incorrect, award **ONE** mark for an appropriate calculation such as

12×24 = incorrect answer.

[2]

24.

7 x 7 – 7 = 42
or
–6 x –6 – –6 = 42

In either case all three numbers must be correct 1

[1]

25. Award **TWO** marks for the correct answer of 5291 up to 2

If the answer is incorrect, award **ONE** mark for evidence of appropriate working which contains no more than **ONE** arithmetical error, eg

- long multiplication algorithm such as

$$\begin{array}{r} 143 \\ \times 37 \\ \hline 1001 \\ 4290 \\ \hline \end{array}$$

wrong answer

- grid method

	100	40	3
30	3000	1200	90
7	700	280	21

= wrong answer

- decomposition methods, eg

$143 \times 40 = 5720$

$143 \times 3 = 429$

$5720 - 429$ = wrong answer

*In all cases accept follow through of **ONE** error in working.*

***Do not** award any marks if:*

- the error is in the place value, eg the omission of the zero when multiplying by three tens,

$$\begin{array}{r} 1001 \\ +\,429 \\ \hline \end{array}$$

- the final (answer) line of digits is missing.

Variations on algorithms are acceptable, provided they represent viable and complete methods.

*Calculation must be performed for the award of **ONE** mark.*

[2]

26. 5 and 6 written in the boxes in either order as shown: 1m

5	0	×	**6**	0	=	3	0	0	0

OR

6	0	×	**5**	0	=	3	0	0	0

[1]

27. Award **TWO** marks for the correct answer of 42 Up to 2m

If the answer is incorrect award **ONE** mark for evidence of appropriate working containing no more than one arithmetic error, eg

- long division algorithm

wrong answer

$$\begin{array}{r} \\ 22\overline{)\,924} \\ 880 \\ \hline 44 \\ -\,44 \\ \hline 0 \end{array}$$

*Calculation must be performed for the award of **ONE** mark.*

- short division algorithm

wrong answer

$$22\overline{)924}$$

Short division methods must be supported by evidence of appropriate carrying figures to indicate use of a division algorithm.

- repeated addition / subtraction methods

$$\begin{array}{rl} 924 & \\ -\,440 & 20\times 22 \\ \hline 484 & \\ -\,440 & 20\times 22 \\ \hline 44 & \\ -\,44 & 2\times 22 \\ \hline 0 & \text{wrong answer} \end{array}$$

***No mark** is awarded for repeated addition / subtraction the wrong number of times.*

- factor / multiple methods, eg

$22 \times 10 = 220$
$\times \quad 4$
$22 \times 40 = 880$
$+ \quad 44$
924
$924 \div 22 =$ **wrong answer**

[2]

28. Award **TWO** marks for the correct answer of 12216 Up to 2m

If the answer is incorrect, award **ONE** mark for evidence of appropriate working which contains no more than **ONE** arithmetical error, eg

- conventional algorithms such as:

$$\begin{array}{r} 509 \\ \times \quad 24 \\ \hline 2036 \\ 10180 \\ \hline \text{wrong answer} \end{array}$$

*In all cases accept follow through of **ONE** error in working.*

***Do not** award any marks if:*

- *the error is in the place value, for example the omission of the zero when multiplying by the 2 tens;*
- *the final (answer) line of digits is missing.*

Variations on algorithms are acceptable, provided they represent viable and complete methods.

OR

- decomposition methods, eg
  $24 \times 500 = 12000$
  $24 \times 9 = 216$
  $12000 + 216 =$ wrong answer

*Calculation must be performed for the award of **ONE** mark.*

[2]

29. 3 **AND** 7 **AND** 11 1m

Accept numbers in any order.

[1]

30. Award TWO marks for the correct answer of 9913. up to 2

If the answer is incorrect award **ONE** mark for evidence of appropriate working which contains no more than **ONE** arithmetical error, eg

- Long multiplication, such as

$$\begin{array}{r} 431 \\ \times \ 23 \\ \hline 1293 \\ 8620 \\ \hline \end{array}$$

wrong answer

In all cases accept follow through of an error in working.

- Short multiplication, such as

  431
  × 23

  wrong answer

  ***Do not** award any marks if:*

  - the error is in the **place value**, for example the omission of the zero when multiplying by the 2 tens;
  - the final (answer) line of digits is missing.

  Variations on algorithms are acceptable, provided they represent viable and complete methods.

AND evidence of multiplication taking place, eg the presence of appropriate carrying figures.

- Repeated addition, such as attempts to add 431 twenty-three times.
- Decomposition methods, such as

  400 ×23 = 9200 **AND** 31 ×23 = 713

  AND

  9200
  +713

  wrong answer

- Any combination of methods which are viable and complete, such as 431 + 431, = 862

  431 ×3 = 1293 8620 +1293 = wrong answer

  ***Do not** award any marks if 431 is added the wrong number of times.*

[2]

31. Explanation that implies that 28 must be added to 3836, eg: 1

- 'Just add another 28 on'
- 'Do another 28 on'
- 'It's an extra 28'
- '3836 + 28'

***Do not** accept vague or arbitrary reasons, eg:*

'Do the same sum but add 1 to the number';

'Do a times sum';

'Just another unit on'.

***No mark** is awarded for giving the answer 3864 without an adequate explanation.*

[1]