

Answers to Year 6 Maths Challenges

Monday - Number

2 7 4 3

Award **TWO** marks for numbers completed, as shown:

$$354 \times 9.5 =$$

3,363

$$3,540 \times 95 =$$

336,300

$$3,363 \div 95 =$$

35.4

Award **ONE** mark for any two numbers completed correctly.

***Do not** accept transcription errors or misreads for this question.*

(a) 9,999,995

1

(b) 5,900,000

1

Award **TWO** marks for all four letters in the correct order as shown:

99 J

29 G

-83 A

-15 E

44 H

$$\begin{array}{|c|c|} \hline 3 & 2 \\ \hline \end{array} \times \begin{array}{|c|} \hline 4 \\ \hline \end{array}$$

2,109,000

1

80,000

1

Tuesday 2st April 2020 - Four operations

Award **THREE** marks for the correct answer of 7,174

Award **TWO** marks for the correct answer of 40

Award **TWO** marks for the correct answer of 101

Award **TWO** marks for the correct answer of £1.68

Award **TWO** marks for the correct answer of £0.90

Both numbers correct as shown:

$$\begin{array}{c} \boxed{9} \\ \text{square} \\ \text{number} \end{array} + \begin{array}{c} \boxed{13} \\ \text{prime} \\ \text{number} \end{array} = 22$$

Wednesday 22nd April 2020 – Fractions, Decimals and Percentages

£140

Do not accept 140%

Award **TWO** marks for the correct answer of 184

$1\frac{1}{2}$	1.2
----------------	-----

$1\frac{1}{4}$	1.3
----------------	-----

$1\frac{5}{100}$	1.4
------------------	-----

$1\frac{3}{5}$	1.5
----------------	-----

35%

(a) $6\frac{1}{4}$

Accept equivalent fractions.

Do not accept $5\frac{5}{4}$

1

(b) $1\frac{1}{2}$

Accept equivalent fractions, eg

$1\frac{2}{4}, \frac{3}{2}, 1.5, 150\%$

1

[2]

Thursday 23rd April 2020 – Algebra

Second box only ticked correctly, as shown:

number of tickets $\times 3 + 24$

☐

number of tickets $\times 24 + 3$

☒

number of tickets $+ 3 \times 24$

☐

number of tickets $+ 24 \times 3$

☐

Accept alternative unambiguous positive

Award **ONE** mark for the correct box ticked, as shown:

Tick **one**.

$10 + a$

☐

$10 \div a$

☐

$a - 10$

☐

$10 - a$

☒

$a \times 10$

☐

Accept alternative unambiguous positive indication of the correct answer, e.g. Y.

(a) 140

The answer is a time interval

1

(b) 2

1

(a) $\triangle = 32$

1

(b) $\bigcirc = 18$

*If the answers to $\bigcirc$ and $\triangle$ are incorrect,
award **ONE** mark if*

$\triangle + \bigcirc = 50$ unless $\bigcirc = 25$

1

(a) £2.55

1

(b) Award **TWO** marks for the correct answer of 25

If the answer is incorrect, award **ONE** mark for evidence of an appropriate method, e.g:

- $\begin{aligned} \pounds 5.15 - 15\text{p} &= \pounds 5 \\ \pounds 5 \div 20\text{p} \end{aligned}$

OR

- $\begin{aligned} \pounds 5.15 - 15\text{p} &= \pounds 5 \\ 5 \times 5 \end{aligned}$

*Answer need not be obtained for the award
of **ONE** mark.*

Commentary: The 2014 national curriculum specifies that pupils should use simple formulae (6A2).

Up to 2

Friday 24th April 2020 – Measurement

(a) 7

Do not accept –7 or 7–

1

(b) Oslo

Accept unambiguous abbreviations or recognisable misspellings.

1

Award **TWO** marks for the correct answer of 30.

Award **TWO** marks for the correct answer of 77°F.

(a) 46

The answer is a time interval.

1

(b) 10:44

The answer

Award **TWO** marks for the correct answer of £16,470

(a) 38

The answer is a time interval.

1

(b) 10:21

The answer is a specific time.