Year 6 revision homework: Mark schemes

Fractions:

Q1.

$\frac{10}{30}$

Accept equivalent fractions or the exact decimal equivalent, e.g. $\frac{1}{3}$ or $0.\dot{3}$ *(accept any unambiguous indication of the recurring digits).*
Do not accept rounded or truncated decimals.

Q2.

$48\frac{3}{4}$ OR $\frac{195}{4}$

Accept equivalent mixed numbers, fractions or the exact decimal equivalent, i.e. 48.75
Do not accept rounded or truncated decimals.

Q3.

$\frac{5}{24}$

Accept equivalent fractions or the exact decimal equivalent, e.g. $\frac{10}{48}$ or $0.2083\dot{}$ *(accept any unambiguous indication of the recurring digits).*
Do not accept rounded or truncated decimals.

Q4.

$\frac{7}{20}$

Accept equivalent fractions or the exact decimal equivalent, i.e. 0.35
Do not accept rounded or truncated decimals.

Q5.

$1\frac{1}{12}$ OR $\frac{13}{12}$

Accept equivalent mixed numbers, fractions or the exact decimal equivalent, i.e. $1.083\dot{}$ *(accept any unambiguous indication of the recurring digits).*
Do not accept rounded or truncated decimals.

Q6.

$4\frac{1}{5}$ OR $\frac{21}{5}$

Accept equivalent mixed numbers, fractions or the exact decimal equivalent, i.e. 4.2

Q7.

$\frac{2}{9}$

Accept equivalent fractions or the exact decimal equivalent, e.g. $\frac{4}{18}$ or $0.\dot{2}$

(accept any unambiguous indication of the recurring digits).

Do not accept rounded or truncated decimals.

Q8.

$3\frac{11}{42}$ OR $\frac{137}{42}$

Accept equivalent fractions or the exact decimal equivalent, e.g. $3.2\dot{6}1\dot{9}047\dot{}$

(accept any unambiguous indication of the recurring digits).

Do not accept rounded or truncated decimals.

Division

Q1. 19

Q2. Award TWO marks for the correct answer of 172

If the answer is incorrect, award ONE mark for the formal methods of division with no more than ONE arithmetic error, i.e. long division algorithm, e.g.

$$\begin{array}{r} 172\ \text{r}\,10 \\ 26\overline{)\,4472} \\ -\ 2600 \\ \hline 1872 \\ -\ 1820 \\ \hline 52 \\ -\ 42 \\ \hline 10 \end{array}$$ *(error)*

or short division algorithm, e.g. $26\overline{)\,44^{18}7^{5}2}$ *(error)* 1 7 3

Working must be carried through to reach a final answer for the award of ONE mark.

Q3. Award TWO marks for a correct answer of 182

If the answer is incorrect, award ONE mark for the formal methods of division with no more than ONE arithmetic error, e.g.

- long division algorithm, e.g.

```
   181 r10
45 | 8190
   - 4500
     3690
   - 3600
       90
       80   (error)
       10
```

OR

```
   183   (error)
45 | 8190
   - 4500      100 × 45
     3690
   - 3600       80 × 45
       90
       90        2 × 45
```

- short division algorithm, e.g.

```
    1  83  (error)
45 | 81 36 9 9 0
```

Working must be carried through to reach a final answer for the award of ONE mark.

Q4. Award TWO marks for a correct answer of 29

If the answer is incorrect, award ONE mark for the formal methods of division with no more than ONE arithmetic error, e.g.

- long division algorithm, e.g.

```
   29 r6
34 | 986
   - 680
     306
   - 300   (error)
       6
```

OR

```
   28   (error)
34 | 986
   - 680      20 × 34
     306
   - 306       9 × 34
       0
```

- short division algorithm, e.g.

```
    2  8  (error)
34 | 98 30 6
```

Mean average

Q1.

Award TWO marks for the correct answer of £5.50

If the answer is incorrect, award ONE mark for:

- sight of 22 ÷ 4

OR

- evidence of appropriate method, e.g.
  - 3 tickets cost 3 × £5 = £15

    1 ticket costs £7

    £15 + £7 = £22

    £22 ÷ 2 ÷ 2

    For ONE mark, accept an answer of £550, £550p or £5.5 as evidence of appropriate method.

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

Q2.

Award TWO marks for the correct answer of 145

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

- 144
  136
  142
  143
  152
  148

  + 150

  1015

  1015 ÷ 7

Q3.

(a) Award TWO marks for correct answer of 2.8 cm.
If answer is incorrect, award ONE mark for any appropriate calculation
even if the answer is incorrect, eg:

- 28 ÷ 10 = wrong answer.

A calculation MUST be performed for award of one mark.

(b) Award TWO marks for WHOLE NUMBER ANSWER in the range 40 to 50 inclusive, eg:

- 42.8

If answer is outside range, award ONE mark for an appropriate calculation, eg:

- 120 ÷ 28 × 10 = wrong whole number answer.
- 120 ÷ 30 × 10 = wrong whole number answer.
- 30cm is 10 books.
  60cm is 20 books.
  120cm is … wrong answer.

If answer is outside range, a calculation MUST be performed for award of one mark. If calculation is based upon incorrect answer to 16a, award TWO marks for correct calculation using an appropriate strategy AND rounding of answer to whole number, even if outside range 40–50, eg:

- *120 ÷ answer to 16a = rounded whole number.*
  OR
  ONE mark if there is either an error in calculation
  or failure to round to whole number.