M1.
Alternative method 1

Orders numbers
7.6 9.6 12.4 12.6 15.4 17.4

Smallest to largest or largest to smallest

M1

7.6 and 17.4
and
9.6 and 15.4
and
12.4 and 12.6

Pairs in any order

A1

Alternative method 2

(9.6 + 12.6 + 15.4 + 7.6 + 12.4 + 17.4) ÷ 3 or 25
or
(9.6 + 12.6 + 15.4 + 7.6 + 12.4 + 17.4) ÷ 6 or 12.5
Implied by one correct pair

M1

7.6 and 17.4
and
9.6 and 15.4
and
12.4 and 12.6

Pairs in any order

A1

[2]

M2.
Alternative method 1
£2 £2, 20p, 20p, 20p
or £2, £2, 50p, 5p, 5p
or £2, £1, £1, 50p, 10p

M1

£1, £1, 50p, 10p, 10p
or £2, 20p, 20p, 20p, 10p
or £2, 50p, 10p, 5p, 5p

M1

£2, £2, 20p, 20p, 20p, 10p

M1

£4.70

Correct money notation

A1

Alternative method 2

4.60 – 2.70 or 1.90

oe

M1

£2 and 10p identified

M1

£4.60 + 10p
or £2.70 + £2

Allow mixed units

M1

£4.70

Correct money notation

A1

[4]

M3.

720 ÷ 30
or 0.72 ÷ 0.03
or 24

M1

their 24 × 2

M1dep

48 and No

A1

[3]

M4.
345 – 96 or 249

M1

80 ÷ 10 × 3 or 24
                    oe

M1

their 249 ÷ their 24
or
their 24 × 10 or their 24 × 11
          Condone 345 ÷ 24

M1

11

A1

[4]

M5.

    (a)   0.0048

                                       B1

    (b)   0.000 012

                                         B1

    (c) 2.5×10^6

                                       B1

                                            [3]

M6.

−7.4

                                       B1

                                            [1]

M7.

62 − 34 or 28

          Box C

                                       M1

their 28 − 9 or 19
or
their 28 + 9 or 37

          Box A

                                       M1

(A =) 19, (B =) 15, (C =) 28

          SC2 for their A + their B = 34 and their A − their C = ±9
          SC1 for their A + their B = 34 or their A − their C = ±9

                                       A1

                                            [3]

M8.

(a) $1000 \div 42$ or 23.8(...) or $23\frac{17}{21}$

or $\frac{500}{21}$

M1

23

A1

(b)   34

ft their answer to (a)

B1ft

[3]

M9.
Alternative method 1

5×24.2 or 121 (miles)

M1

their $121 \div 32.3$
or
[3.74, 3.75] (gallons)

M1

their [3.74, 3.75] × 4.5
or
[16.8, 16.9] (litres)

M1

their [16.8, 16.9] × 1.27

M1

[21.33, 21.47] and bus

Accept 21 and bus if working shown

A1

Alternative method 2

5 × 24.2 or 121 (miles)

M1

their 121 ÷ 32.3
or
[3.74, 3.75] (gallons)

M1

1.27 × 4.5
or 5.71(5) or 5.72

M1

their [3.74, 3.75] × their 5.71(5)

M1

[21.33, 21.47] and bus

Accept 21 and bus if working shown

A1

Alternative method 3

19.50 ÷ 5 or 3.9(0)

M1

24.2 ÷ 32.3
or
[0.74, 0.75] (gallons)

M1

their [0.74, 0.75] × 4.5

or
[3.3, 3.4] (litres)

M1

their [3.3, 3.4] × 1.27

M1

[4.19, 4.32] and 3.9(0) and bus
Accept 4 and 3.9(0) and bus if working shown

A1

Alternative method 4

19.50 ÷ 5 or 3.9(0)

M1

24.2 ÷ 32.3
or
[0.74, 0.75] (gallons)

M1

1.27 × 4.5
or 5.71(5) or 5.72
£ per gallon

M1

their [0.74, 0.75] × their 5.71(5)

M1

[4.19, 4.32] and 3.9(0) and bus
Accept 4 and 3.9(0) and bus if working shown

A1

[5]

M10.

7500 – 1875 or 5625

their 5625 ÷ 36

156.25

M1

M1

A1

[3]

M11.

(a)   240 – 87.5(0) or 152.5(0)

M1

152.50

A1

(b)   **Alternative method 1**

120 – 87.5(0) or 32.5(0)

M1

No and 152.5(0) ≠ 2 × 32.5(0)
        oe
        ft part (a)

A1ft

Alternative method 2

152.5(0) ÷ 2 + 87.5(0) or 163.75

M1

No and 163.75
        oe
        ft part (a)

A1ft

[4]

M12.

0.1 × 32 or 3.2(0)

        oe

                  M1

32 – their 3.2(0) or 28.8(0)

        0.9 × 32 or 28.8(0) scores M2

                  M1dep

2000 ÷ their 28.8(0) or 69.(44…)

        Condone their 28.8 being 32

                  M1

2000 ÷ 28.5(0) or 70.(17…)
or
28.5 × 70 = 1995

                  M1

69 and 70 seen and 70 chosen

                  A1

                      [5]

M13.

Alternative method 1

300 × 0.19 or 57

        oe

        300 × 19 or 5700

                  M1

$\frac{5}{100} \times$ their 57 or 2.85

or 1.05 seen

        oe

        $\frac{5}{100} \times$ *their 5700 or 285*

        or 1.05 seen

                  M1dep

their 57 + their 2.85

or their 57 × 1.05

        their 5700 + their 285

        or their 5700 × 1.05 or 5985

                  M1dep

59.85

                  A1

Alternative method 2

$\frac{5}{100} \times 0.19$

or 0.0095

or 1.05 seen

> *oe*
>
> $\frac{5}{100} \times 19$
>
> *or 0.95*
> *or 1.05 seen*

M1

their 0.0095 + 0.19

or 1.05 × 0.19

or 0.1995

> *oe*
> *their 0.95 + 19*
> *or 1.05 × 19*
> *or 19.95*

M1dep

their 0.1995 × 300

> *their 19.95 × 300 or 5985*
> *or 1.05 × 19 × 3*

M1dep

59.85

A1

Alternative method 3

$\frac{5}{100} \times 300$

or 15

or 1.05 seen

> *oe*

M1

their 15 + 300

or 1.05 × 300

or 315

> *oe*

M1dep

their 0.19 × their 315

> *19 × their 315 or 5985*

M1dep

59.85

A1

Additional Guidance
Pick out any correct step, e.g.

$300 \div 19 \times 1.05$

M1M1M0A0

$300 \times 0.5 \times 0.19$

M1M0M0A0

Beware, 10% of 19 = 1.90, 5% of 19 = 0.95, 1.90 + 0.95 = 2.85 (Alt 2)

M1M0M0A0

If a choice of methods is seen, mark the best

[4]

M14.(a) $1600 \div 300$

oe

or

5.(...)

oe mixed number

or

300 × 5 or 1500

oe

or

300, 600, 900, 1200, 1500

or

1600, 1300, 1000, 700, 400, 100

allow one error in adding or subtracting 300

M1

5

A1

(b)   100

*ft only for answer in part (a) **not 5** and correct evaluation of 1600 – their 1500 from part (a) if 1300 1600*

B1ft

[3]

M15.3 × 80 or 240

or

3 × 0.8(0) or 2.4(0)

oe

M1

10 × 50 or 500

or

10 × 0.5(0) or 5(.00)

oe

M1

7.40

Strand (i) correct money notation
ft only if M1M0 or M0M1 awarded
and a correct total of two amounts given in money notation
as a multiple of 10p

Q1ft

[3]

M16.(a)   35 and 65

B1

(b)   34 and 76

B1

(c)   76

B1

(d)   21

B1

[4]