

**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** $(9.6 + 12.6 + 15.4 + 7.6 + 12.4 + 17.4) \div 3$  or 25

or

 $(9.6 + 12.6 + 15.4 + 7.6 + 12.4 + 17.4) \div 6$  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  $\div$  30  
 or 0.72  $\div$  0.03  
 or 24

M1

their 24  $\times$  2

M1dep

48 and No

A1

[3]

**M4.**

345 – 96 or 249

M1

80  $\div$  10  $\times$  3 or 24  
 oe

M1

their 249  $\div$  their 24  
 or  
 their 24  $\times$  10 or their 24  $\times$  11  
*Condone 345  $\div$  24*

M1

11

A1

[4]

**M5.**

(a) 0.0048

**B1**

(b) 0.000 012

**B1**

(c)  $2.5 \times 10^6$

**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  $23.8(\dots)$  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**

$5 \times 24.2$  or 121 (miles)

**M1**

their  $121 \div 32.3$

or

[3.74, 3.75] (gallons)

**M1**

their [3.74, 3.75]  $\times 4.5$

or

[16.8, 16.9] (litres)

**M1**

their [16.8, 16.9]  $\times 1.27$

**M1**

[21.33, 21.47] and bus

*Accept 21 and bus if working shown*

A1

### Alternative method 2

$5 \times 24.2$  or 121 (miles)

M1

their  $121 \div 32.3$

or

[3.74, 3.75] (gallons)

M1

$1.27 \times 4.5$

or 5.71(5) or 5.72

M1

their [3.74, 3.75]  $\times$  their 5.71(5)

M1

[21.33, 21.47] and bus

*Accept 21 and bus if working shown*

A1

### Alternative method 3

$19.50 \div 5$  or 3.9(0)

M1

$24.2 \div 32.3$

or

[0.74, 0.75] (gallons)

M1

their [0.74, 0.75]  $\times$  4.5

or  
 [3.3, 3.4] (litres) M1

their [3.3, 3.4]  $\times$  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  $\div$  5 or 3.9(0) M1

24.2  $\div$  32.3  
 or  
 [0.74, 0.75] (gallons) M1

1.27  $\times$  4.5  
 or 5.71(5) or 5.72  
*£ per gallon* M1

their [0.74, 0.75]  $\times$  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

**M10.**

7500 – 1875 or 5625

M1

their 5625 ÷ 36

M1

156.25

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                                   |       |
| 32 – their 3.2(0) or 28.8(0)         | M1    |
| <i>0.9 × 32 or 28.8(0) scores M2</i> |       |
| 2000 ÷ their 28.8(0) or 69.(44...)   | M1dep |
| <i>Condone their 28.8 being 32</i>   |       |
| 2000 ÷ 28.5(0) or 70.(17...)         | M1    |
| 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 ÷ 300*oe*

or

5.(...)

*oe mixed number*

or

$$300 \times 5 \text{ or } 1500$$

*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.**  $3 \times 80$  or 240

or

$3 \times 0.8(0)$  or  $2.4(0)$   
oe

**M1**

$10 \times 50$  or 500

or

$10 \times 0.5(0)$  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]**