

Multiplication and Division

November 2024 Paper 2

Question	Answer	Mark	Mark scheme	Additional guidance
6	10	P1	for process to find greatest number of bracelets for one colour, eg $52 \div 5 (= 10(.4))$ or $80 \div 7 (= 11(.4..))$	May be seen as a repeated addition or subtraction but must be complete for one colour, eg 50 or 70
		P1	for process to find greatest number of bracelets for both colours, eg $52 \div 5 (= 10(.4))$ and $80 \div 7 (= 11(.4..))$	May be implied by eg 50:70 or 50:77
		A1	cao	Must see working with both colours for this mark.

November 2023 Paper 3

Question	Answer	Mark	Mark scheme	Additional guidance
7	144	P1	for process to begin to work with length, eg $8050 \div 25 (= 322)$ or $178 \times 25 (= 4450)$	3600 implies the first P1 mark
		P1	for full process to find number of lengths remaining, eg “322” – 178 or $(8050 - “4450”) \div 25$ or $3600 \div 25$	
		A1	cao	

November 2021 Paper 1

Question	Answer	Mark	Mark scheme	Additional guidance
7	14	M1 A1	for $42 \div 3$ cao	

November 2021 Paper 2

Question	Answer	Mark	Mark scheme	Additional guidance
7	780	P1 P1 A1	for $2500 - 940 (= 1560)$ or $2500 \div 2 (=1250)$ and $940 \div 2 (=470)$ for “1560” $\div 2$ or “1250” – “470” cao	

June 2020 Paper 1

Question	Answer	Mark	Mark scheme	Additional guidance
10	660	P1	for a process to work out the number of large marbles eg $12 \div 4 (=3)$ or the number of small marbles eg $12 - [\text{number of large marbles}]$ or $12 \times (1 - \frac{1}{4}) (=9)$	[number of large marbles] could come from an incorrect method for finding $\frac{1}{4}$ of 12
		P1	(dep) for a process to work out the weight of large marbles eg “3” $\times 70 (=210)$ or to work out the weight of small marbles eg “9” $\times 50 (=450)$	
		P1	for a complete process eg $(12 \div 4) \times 70 + 12 \times (1 - \frac{1}{4}) \times 50$ oe	
		A1	cao	

June 2022 Paper 3

Question	Answer	Mark	Mark scheme	Additional guidance
11	Yes (supported)	M1 M1 C1	for $48 \times 3 (=144)$ or $35 \times 4 (= 140)$ or $48 \div 4 (=12)$ for $48 \times 3 (=144)$ and $35 \times 4 (= 140)$ or “140” $\div 48 (=2.9\dots)$ or “140” $\div 3 (=46.6\dots)$ or “12” $\times 3 (=36)$ or “144” $\div 4 (=36)$ or “144” $\div 35 (=4.1\dots)$ for Yes with 144 and 140 OR 36 OR 2.9... OR 4 (spare) OR 4.1... (each frame) OR 46.6... (in each box)	

June 2020 Paper 2

Question	Answer	Mark	Mark scheme	Additional guidance
13	19	P1	for $4275 \div 28 (= 152(.678..))$ or 153 or a build up to at least $150 \times 28 (=4200)$	Division may be seen as a build up method
		P1	for “152” $\times 28 (= 4256)$ or “153” $\times 28 (=4284)$ or (“152.678..” $- 152$) $(=0.678..)$ or $4275 \div$ “152” $- 28(= 0.125)$ or $4275 -$ “4200” $(=75)$ oe	Use of 150×28 or better for “4200”
		A1	cao	

June 2024 Paper 1

Question	Answer	Mark	Mark scheme	Additional guidance												
14	14742	M1	for complete correct method with relative place value correct eg two lines of 1st method, internal numbers of grids, or complete structure shown of partitioning methods	$\begin{array}{r} 13650 \\ 1092 \\ \hline 14742 \end{array}$ <table border="1"> <tbody> <tr> <td></td> <td>200</td> <td>70</td> <td>3</td> </tr> <tr> <td>50</td> <td>10000</td> <td>3500</td> <td>150</td> </tr> <tr> <td>4</td> <td>800</td> <td>280</td> <td>12</td> </tr> </tbody> </table> $10000 + 3500 + 150 + 800 + 280 + 12 = 14742$		200	70	3	50	10000	3500	150	4	800	280	12
	200	70	3													
50	10000	3500	150													
4	800	280	12													
		M1	(dep on M1) for addition of all the appropriate elements of the calculation													
		A1	cao													

June 2020 Paper 2

Question	Answer	Mark	Mark scheme	Additional guidance
17 (a)	5	P1	for finding the number of oranges required eg $8 \div 2 \times 30 (=120)$ oe or for finding the number of oranges left from use of at least 2 boxes eg $24 \times 2 - 30 (=18)$ or $24 \times 4 - 90 (=6)$ or finds the correct amount of juice possible from at least two boxes eg $24 + 24$ is 2 litres or $24 + 24 + 24$ is 4 litres	A build up method with no process shown must use fully correct figures
		P1	for a complete process eg " 120 " $\div 24 (=5)$ oe or $30 + 30 + 30 + 30 (=120)$ and $24 + 24 + 24 + 24 (=120)$ or $24 \times 2 - 30 = 18$, $18 + 24 = 42$, $42 - 30 = 12$, $12 + 24 = 36$, $36 - 30 = 6$, $6 + 24 = 30$	May be seen as a mixture of repeated subtraction and addition
		A1	cao with no arithmetic errors seen	This mark cannot be awarded if the supporting work has an arithmetic error
			SCB1 for an answer of 10 supported by working	An answer only and no working is no marks
(b)	9 : 2	M1	for a partially simplified correct ratio eg $126 : 28$ or any other equivalent ratio or $2 : 9$	eg $630:140$, $315:70$, $63: 14$ $180:40$, $90:20$, $45:10$, $4.5:1$
		A1	cao	

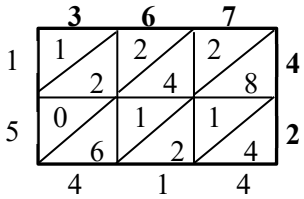
November 2024 Paper 1

Question	Answer	Mark	Mark scheme	Additional guidance
18	682	M1	for a start to a method, eg. $8184 \div 12$ (or $818.4 \div 1.2$) that leads to 6 as the first digit or for a complete method with no more than one arithmetic error	A start to a repeated subtraction method or build-up method is acceptable if a correct first digit of 6 is found
		A1	for digits 682	
		A1	(ft) (dep M1) for correct placement of the decimal point into their final answer	

June 2023 Paper 1

Question	Answer	Mark	Mark scheme	Additional guidance
20	56.4	M1	for a start to a method, eg $846 \div 15$ or $8.46 \div 0.15$ or $8.46 \div 3 \times 20$ or $282 \div 5$ that leads to 5 as the first digit. or for a complete method with no more than one arithmetic error.	A start to a repeated subtraction method or a build-up method is acceptable if a correct first digit of 5 is found
		A1	for digits 564 identified	
		A1	(ft) dep on M1 for correct placement of the decimal point into their final answer	An answer of $56\frac{2}{5}$ gets 3 marks

November 2021 Paper 1

Question	Answer	Mark	Mark scheme	Additional guidance												
20 (a)	15.414	M1	for a complete method with relative place value correct including an intention to add all the appropriate elements of the calculation eg, 2 lines of the 1st method, internal numbers of grids, or complete structure shown of partitioning methods.	<p>14680 734 15414</p>  <table border="1" data-bbox="1579 566 2011 678"> <tr> <td></td> <td>300</td> <td>60</td> <td>7</td> </tr> <tr> <td>40</td> <td>12000</td> <td>2400</td> <td>280</td> </tr> <tr> <td>2</td> <td>600</td> <td>120</td> <td>14</td> </tr> </table> <p>$12000 + 2400 + 280 + 600 + 120 + 14 = 15414$</p>		300	60	7	40	12000	2400	280	2	600	120	14
	300	60	7													
40	12000	2400	280													
2	600	120	14													
(b)	37.4	M1	for a start to a method, eg $598.4 \div 16$ (or $59.84 \div 1.6$) = 3 (as a first digit)	A start to a repeated subtraction method or build-up method is acceptable if a correct first digit of 3 is found												
		A1	for digits 15414													
		A1	(ft) dep on M1 for correct placement of the decimal point into their final answer													
		A1	for digits 374													
		A1	(ft) dep on M1 for correct placement of the decimal point into their final answer													

