

RATIO

Pearson Edexcel - Tuesday 19 May 2020 - Paper 1 (Non-Calculator) Foundation Tier

1.

9	(a)	$\frac{3}{7}$	B1	oe	
	(b)	1 : 2.5	M1	for appropriate method shown eg $30 \div 12 (= 2.5)$ or for a method that involves simplification of 12 : 30 approaching 1 : n , eg. 4 : 10 or 6 : 15 or 2 : 5 or for 2.5 : 1 or $2\frac{1}{2} : 1$	
			A1	for 1 : 2.5 or $1 : 2\frac{1}{2}$ or for $n = 2.5$	Accept a fraction equivalent to $2\frac{1}{2}$ eg. $1 : \frac{30}{12}$ 2.5 alone gets M1A0

Pearson Edexcel - Thursday 4 June 2020 - Paper 2 (Calculator) Foundation Tier

2.

20		1.75	P1	for an initial process eg $1.80 \div 12 (=0.15)$ or $1.80 \div 3 (=0.6)$	Accept $1.8 \div 12 = 15$ (p) They can work in pounds or pence
			P1	for a correct second step eg " 0.15 " $\div 3 (=0.05)$ or " 0.6 " $\times 7 (=4.2)$ or $3 \div "0.15" (=20)$ or $7 \div 3 (=2.3..)$ or " 0.15 " $\times 7 (=1.05)$	
			P1	for finding the price of one pen eg " 0.05 " $\times 7 (=0.35)$ or " 4.2 " $\div 12 (=0.35)$ or $7 \div "20" (=0.35)$ or " $2.3...$ " $\times "0.15" (=0.35)$ or " 1.05 " $\div 3 (=0.35)$	
			A1	cao	

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3.

27		96	P1	for process to find the ratio of the number of pens of each colour sold, eg $2 \times 7 : 5 \times 3 : 6 \times 4 (= 14 : 15 : 24)$	Does not have to be seen as a ratio but all three needed
			P1	for process to find the proportion of green pens sold, eg $\frac{212}{"14"+"15"+"24"}$ or $\frac{"24"}{"14"+"15"+"24"}$	
			P1	for a complete process to find the number of green pens sold, eg $\frac{212}{"14"+"15"+"24"} \times "24"$ or $\frac{"24"}{"14"+"15"+"24"} \times 212$	
			A1	cao	P3 can be implied by the values 56, 60 and 96

Pearson Edexcel - Thursday 6 June 2019 - Paper 2 (Calculator) Foundation Tier

4.

26	168	P1	for working with ratio to find the amount for C or D eg. $1.5 \times 2 (=3)$ or (A, B, C, D =) 2, 7, 3, 3 oe OR for suitable expressions linking A with C or D, eg. $A = x, C = 1.5x$	
		P1	for "2 + 3 + 3 + 7" (=15) OR adds 4 suitable expressions, eg. " $x + 3.5x + 1.5x + 1.5x$ " (= 7.5x)	
		P1	for a complete process to find the amount of money eg. $360 \div "15" \times 7$ OR $360 \div "7.5" \times 3.5$	
		A1	cao	

Pearson Edexcel - Tuesday 11 June 2019 - Paper 3 (Calculator) Foundation Tier

5.

12	$\frac{9}{25}$	M1	for $\frac{n}{6+9+10}$ where n is an integer < 25	
		A1	for $\frac{9}{25}$	Or equivalent fraction

6.

23	612	P1	Alan: for $100 - 32 - 40 (= 28)$ or for finding "28%" of 400 eg $400 \times 0.28 (=112)$	
		P1	Beryl: for $1 - \frac{3}{10} - \frac{1}{10} \left(= \frac{6}{10} = 60\% \right)$ or for finding " $\frac{6}{10}$ " $\times 500$ (=300)	
		P1	Charlie: for starting to use the ratio 3 : 4 eg $150 \div 3 (=50)$	
		P1	for complete ratio process eg " $\frac{150}{3}$ " $\times 4$ (=200)	
		A1	cao	Answers only (without working) award 0 marks.

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7.

15	(a)	420	P1	starts process, eg $300 \div 5 (= 60)$ or $200 \div 2 (= 100)$ OR builds up ratio to at least 300 ml orange juice with one error	
			P1	complete process, eg " 60 " $\times 5 + "60" \times 2$ or $300 : 120$	
			A1	cao	May be seen as " 60 " $\times 7$ " 60 " must come from correct method
	(b)	explanation	C1	explains that it will have no effect with reason, eg because he only needs 120 ml of lemonade because he has no more orange juice to use	

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8.

20	140	P1	for beginning to solve the problem eg $50 \div 5 \times 8 (=80)$ or $14 : 8 : 5$ oe $14 : 8$ and $8 : 5$ oe (linked)	80 may be seen in the ratio $80 : 50$ If 140 clearly identified as houses in working award full marks
		P1	for a full process to solve the problem eg " 80 " $\div 4 \times 7$ or $\frac{50}{5} \times "14"$ or $140 : 80 : 50$	
		A1	cao	

Pearson Edexcel - Tuesday 12 June 2018 - Paper 3 (Calculator) Foundation Tier

9.

16	(a)	10	M1	for a start of method to find Bisphah's share, eg $2.50 \times 8 (=20)$ or $\frac{1}{2} \div \frac{1}{8} (=4)$	Accept 10.00 Accept working in pence, or in £ given as a decimal oe NB: award this mark if the working is seen in part (a) Accept 3:1 (correct answer in reverse order) which can also be an equivalent ratio to 3:1 Award full marks for 1 : 3 or an equivalent ratio. If an equivalent ratio to 1:3 is shown and then simplified incorrectly award full marks.
	(b)	1 : 3	A1	cao	
			P1	for a process to find Chan's share, eg " 20 " $- 2.5 - [\text{Bisphah's money}] (=7.5)$ or $1 - \frac{1}{8} - \frac{1}{2} (= \frac{3}{8})$	
			P1	for a correct ratio eg $2.5 : "7.5"$ or $\frac{1}{8} : \frac{3}{8}$ or $3 : 1$ oe	
			A1	for 1 : 3 oe eg 5 : 15	

Pearson Edexcel - Thursday 2 November 2017 - Paper 1 (Non-Calculator) Foundation Tier

10.

18		135	M1	for $450 \div "2+3+5" (=45)$ or $\frac{3}{10} \times 450 (=135)$ or 5 parts are 225 or 2 parts are 90 indicated
			A1	Cao

11.

24		14:21:42	P1	for 2 out of 3 expressions in one letter eg from $x, x+7, 2x+14$ or see a set of numbers to show interpretation of the relationships, eg 10, 17, 34
			P1	(dep) for sum of their 3 expressions =77 eg $x + x+7+2x+14 =77$ oe or 2 systematic correct trials including addition
			P1	for a correct process to isolate their term in x or $x=14$
			A1	for ratio 14:21:42 oe

Pearson Edexcel - Monday 6 November 2017 - Paper 2 (Calculator) Foundation Tier

12.

6 (a)		$\frac{3}{7}$	B1	for $\frac{3}{7}$ or equivalent fraction
(b)		3 : 1	B1	for 3 : 1 or equivalent ratio

Pearson Edexcel - Wednesday 8 November 2017 - Paper 3 (Calculator) Foundation Tier

13.

10		60	M1 A1	for method to find the number, eg. $48 \times \frac{3}{2} (=72)$ or to find $\frac{1}{6}$ th of the number, eg. $48 \div 4 (=12)$ cao
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14.

12	Complete methods $3.60 \div 2.5 \times 3.5$ or $3.60 \div 5 \times 7$ or $3.5 \div (2.5 \div 3.6)$ or $\frac{3.5}{2.5} \times 3.6$ or $3.6 \div \frac{2.5}{3.5}$	5.04	M1 A1	for a correct first step to find the cost of a unit of weight (eg. 1 kg or 0.5 kg) eg $3.60 \div 2.5 (= 1.44)$ or $3.60 \div 5 (= 0.72)$ or a complete alternative method for 5.04 (accept £5.04p)
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15.

15		(£6), 18, 24, 27 15, 45, 60, 67.50	M1 M1 A1	demonstrates a proportional method to find at least one cost for cotton, eg. $£6 \div 2 \times 9 (= (£)27)$ or a correct entry in the table. demonstrates a proportional method to find at least one cost for silk, eg. $£6 \div 2 \times 5 (= (£)15)$ or a correct entry in the table. for a fully correct table (accept 67.5(0))
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16.

22		15	P1 P1 A1	strategy to start the problem, eg 8 : 20 and 20 : 5 process to solve the problem, eg $\frac{5}{33} \times 100$ or 24 : 60 : 15 cao
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Pearson Edexcel – Specimen 2 - Paper 1 (Non-Calculator) Foundation Tier

17.

8		15	M1 A1	For start to scaling process eg $12 \div 8$ or $10 \div 8$ 15
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18.

12		700	<p>P1 for process for total non-fiction books eg $\frac{1}{4} \times 80 (=20)$</p> <p>P1 process for total takings for non fiction eg $20 \times \frac{1}{2} \times 10 (=100)$</p> <p>P1 process to find total takings “100” + 60×10 A1 700</p>
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Pearson Edexcel – Specimen 2 - Paper 2 (Calculator) Foundation Tier

19.

18		3 : 4	<p>M1 for $32 - 8 (=24)$ M1 (dep) for “24” : 32 A1 cao</p>
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20.

27	<p>6 : 5 = 12 : 10 2 : 1 = 10 : 5 C : S : P = 12 : 10 : 5</p> <p>$\frac{10}{27} \times 189$</p>	70	<p>P1 for strategy to start to solve the problem eg 12 : 10 and 10 : 5</p> <p>P1 for process to solve the problem eg $\frac{10}{27} \times 189$ A1 cao</p>
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Pearson Edexcel – Specimen 2 - Paper 3 (Calculator) Foundation Tier

21.

22		171	<p>P1 for process to find one share P1 for process to find total A1 cao</p>
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Pearson Edexcel – Sample Paper 1 (Non-Calculator) Foundation Tier

22.

25		28	<p>P1 Process to start to solve problem eg. $\frac{3}{5} \times 40$ or divide any number in the ratio 3:2</p> <p>P1 Second step in process to solve problem eg. $\frac{2}{5} \times 10$ or find number of males/females under 25 for candidate’s chosen number</p> <p>P1 for complete process A1</p>
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23.

27		400	<p>P1 Start to process eg. $1200 \div 60$</p> <p>A1 400 oe (accept number of whole pizzas eg. $400 \div 4 = 100$ with 4 people per pizza)</p> <p>C1 Eg. Assumption that sample is representative of population – it may not be all 1200 people are going to the party – need less pizza if they don't, assume 4 people per pizza – if different may need more/fewer pizzas</p>
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OCR – Tuesday 03 November 2020- Morning - Paper 1 (Calculator) Foundation Tier

24.

7	(a)	32 : 40	2	M1 for $72 \div (4 + 5)$ soi by 8	M1 implied by values 32 and 40
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25.

20		63	4	<p>M1 for $80 + 65 + 95$ or 240 seen as total</p> <p>M1 for <i>their</i> $240 \times [0].6$ or 144</p> <p>M1 for <i>their</i> $144 - 43 - 38$</p> <p>If 0 scored SC1 for 0.6×95 or 57</p>	<p>condone $\frac{63}{95}$ for 4 marks and mark the method leading to <i>their</i> answer</p>
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OCR Monday 11 November 2019 – Afternoon (Calculator) Foundation Tier

26.

9		40 : 48 linked to 5 : 6 or 100 : 120 linked to 5 : 6 or 1 : 1.2 linked to 5 : 6	3	<p>B2 for 48 or 120 or B1 for 8</p>	<p>40 : 48 = 5 : 6 is enough. Allow $\frac{40}{48} = \frac{5}{6}$ for 3 marks</p>
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OCR Tuesday 21 May 2019 – Morning (Calculator) Foundation Tier

27.

19	(a)	$\frac{5}{36}$ or equivalent fraction	3	<p>M2 for $\frac{5}{3+4+5} \times \frac{1}{3}$ oe implied by e.g. [0].139,</p> <p>[0].1388..., 13.9%, 13.88..%, $\frac{1.6}{12}$, $\frac{1.66[6.]}{12}$, $\frac{1.67}{12}$, $\frac{1.7}{12}$, $\frac{5}{3}$ or better</p> <p>OR</p> <p>B1 for $\frac{5}{12}$ or equivalent fraction or 0.416 or better</p> <p>OR</p> <p>M1 for $(\frac{3}{3+4+5}$ or $\frac{4}{3+4+5}) \times \frac{1}{3}$ oe or $\frac{1}{3} \times 5$ oe, implied by 1.6, 1.66[6...], 1.67 or 1.7 or better</p>
	(b)	4000	2	<p>M1 for $1600 \div 8$ or $(5+7+8) \div 8$ implied by 200 or 2.5</p>

OCR Tuesday 6 November 2018 – Morning (Calculator) Foundation Tier

28.

5	(a)		1 : 19	1		
	(b)		12	2	M1 for $8 \div 2$ soi by 4 or 8×1.5 oe	

OCR Thursday 8 November 2018 – Morning (Non-Calculator) Foundation Tier

29.

11			Flour 350 Butter 280 Sugar 140	4	M1 for [5 :] 4 : 2 soi and M1 for $770 \div their(5 + 4 + 2)$ and M1 for $5 \times their\ 70$ or $4 \times their\ 70$ or $2 \times their\ 70$	Can be implied by 1 part = 70 soi <i>their</i> (5 + 4 + 2) must come from <i>their</i> stated 3 part ratio
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30.

10	(a)	(i)	$x = 3$	1		
		(ii)	$y = x$	1		Condone $y = x \pm 0$
	(b)		Correct sketch of the graph of $y = x^2$.	1		U shaped graph, approximately symmetrical going through the origin

OCR Monday 24 May 2018 – Morning (Calculator) Foundation Tier

31.

5	(a)		2 : 9	2	B1 for 6 : 27 oe	Any correct simplified ratio of 12 : 54 Including 1 : 4.5 for B1
	(b)		2.5 cao	2	B1 for 400 : 1000 oe	Allow 1 : 2.5 for B1 Condone inclusion of units for B1 only
	(c)		161	3	M2 for $\frac{115}{5} \times (2 + 5)$ oe M1 for $\frac{115}{5}$ soi by 23 or 46	

OCR Thursday 7 June 2018 – Morning (Non Calculator) Foundation Tier

32.

9	a		Valid explanation	1	Such as 'It should be $\frac{2}{5}$ '	eg $\frac{2}{3}$ is more than half See AG
	b		6 : 11 or 1 : $\frac{11}{6}$ or 1 : $1\frac{5}{6}$ or $\frac{6}{11}$: 1	1		Condone ratio not in its simplest form, eg using $\frac{6}{17}$ and $\frac{11}{17}$

OCR Tuesday 12 June 2018– Morning (Calculator) Foundation Tier

33.

22	(a)		$\frac{4.44 \times 10^9}{1.47 \times 10^8}$ 30.2[0...] or 3.02[0...] $\times 10^{[1]}$	M1 A1	If 0 scored SC1 for $1.47 \times 10^8 \times 30 = 4.41 \times 10^9$ or $\frac{4.44 \times 10^9}{30} = 1.48 \times 10^8$	Accept in ordinary numbers $\frac{4\ 440\ 000\ 000}{147\ 000\ 000}$ $147\ 000\ 000 \times 30 = 4\ 410\ 000\ 000$ or $\frac{4\ 440\ 000\ 000}{30} = 148\ 000\ 000$
22	(b)		Recognise other distances are possible	1	B1 for statement with distance oe and varies oe Mark the best bit if not contradictory	See appendix eg No information about other positions or [30] only for closest [distance]. Do not accept "It varies..."

OCR Thursday 2 November 2017– Morning (Calculator) Foundation Tier

34.

12			6000	4	B3 for 1125, 1875 and 3000 OR M3 for $750 \div 2 \times \text{their}$ (3+5+8) OR M2 for $750 \div 2 \times 3$ or $750 \div 2 \times 5$ or $750 \div 2 \times 8$ OR M1 for $750 \div 2$ soi by 375 If 0 scored SC2 for $750 + 1250 + 2000 = 4000$ or $450 + 750 + 1200 = 2400$ OR SC1 for 750 ,1250 ,2000 or 450, 750, 1200 OR SC1 for [Leo] x [Kush] x + 750 [Mai] $2x + 750$ and totals to $4x + 1500$	
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OCR Monday 6 November 2017– Morning (Calculator) Foundation Tier

35.

19	a		$180 \div (1 + 2 + 3) \times 3 [= 90]$	2	M1 for $180 \div (1 + 2 + 3)$ If 0 scored, SC1 for angles 30, 60, 90	Condone 6 for $1 + 2 + 3$
	b		7.5	4	B1 for $\sin 30^\circ$ or $\cos 60^\circ = \frac{1}{2}$ soi M2 for $15 \sin 30$ oe or M1 for $x/15 = \sin 30$ oe	

36.

20			80	4	M3 for $250 \div (8k + 10k + 7k) \times 8k$ oe or M2 for $250 \div (8k + 10k + 7k)$ oe or M1 for two ratios with a common number of women implied by $8k$ (men) and $7k$ (children) seen, $k > 0$ or for $8 : 10 [: 7]$ or $[4 :] 5 : 3.5$ seen	M3 implied by 80, 100, 70 with 80 not selected e.g. 0.8 and 0.7, 4 and 3.5
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Pearson Edexcel – Sample Papers - Paper 1 (Non-Calculator) Foundation Tier

37.

10			$\frac{2}{7}$	B1
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Pearson Edexcel –Sample Papers - Paper 2 (Calculator) Foundation Tier

38.

23			96	P1 a strategy to start to solve the problem eg $18 \div (7 - 4) (=6)$ P1 for completing the process of solution eg $"6" \times (4 + 5 + 7)$ A1 cao
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OCR Wednesday 8 November 2017– Morning (Calculator) Foundation Tier

39.

6	(a)		5 : 2	2	B1 for 30 [:] 12 oe If 0 scored SC1 for 5 : 7 or 2 : 5	Condone same units in ratios B1 for 15 : 6 or 10 : 4 or 2.5 : 1 or 1 : [0].4 may miss ratio signs
	(b)		[0].28	2	B1 for 250 or [0].7 seen or 2500 and 700 or figs 28 in answer If 0 scored SC1 for [1:] 3.57[1...]	Condone answer 1 : [0].28 for B2
	(c)	(i)	5000	1		
		(ii)	50	2	M1 for <i>their</i> $5000 \div 2 \div 50$ oe	

40.

16	(a)	(i)	$\frac{1}{5}$ of Bag A's counters [are red] or The ratio of red to yellow in Bag B is 1:3	1	Accept $1 : 4 = \frac{1}{5}$ Accept $\frac{1}{4} = 1 : 3$	Equivalents may be percentages or decimals Eg. Bag A: 20% red, Bag B: 25% red.									
		(ii)	Correct answer is any integer multiple of this. <table border="1" style="margin-left: 20px;"> <tr> <td></td> <td>Red</td> <td>Yellow</td> </tr> <tr> <td>Bag A</td> <td>4</td> <td>16</td> </tr> <tr> <td>Bag B</td> <td>5</td> <td>15</td> </tr> </table>		Red	Yellow	Bag A	4	16	Bag B	5	15	3	B1 for (Bag A) yellow = 4 × red and A total = B total B1 for (Bag B) yellow = 3 × red If 0 scored SC2 for correct figures but transposed horizontally	Eg $\begin{matrix} \times 2 & & \times 3 \\ 8 & 32 & & 12 & 48 \\ 10 & 30 & & 15 & 45 \end{matrix}$ $\begin{matrix} \times 4 & & \times 5 \\ 16 & 64 & & 20 & 80 \\ 20 & 60 & & 25 & 75 \end{matrix}$ $\begin{matrix} \times 6 & & \times 10 \\ 24 & 96 & & 40 & 160 \\ 30 & 90 & & 50 & 150 \end{matrix}$
	Red	Yellow													
Bag A	4	16													
Bag B	5	15													
	(b)		20 nfw	3	B1 for two ratios equivalent to 3:4 M1 for <i>their</i> 15:20 reduced to (15-3):20 <u>Alternative approach</u> B1 for two fractions equivalent to $\frac{3}{7}$ M1 for <i>their</i> $\frac{15}{35}$ reduced to $\frac{15-3}{32}$	6:8, 9:12, 12:16, 15:20,... <i>their</i> 15:20 any ratio but not 3:4 using equivalent fractions: Eg $\frac{6}{14}$ or $\frac{9}{21}$ or $\frac{12}{28}$ or $\frac{15}{35}$ <i>their</i> $\frac{15}{35}$ any fraction but not $\frac{3}{7}$									

41.

20			$2a - 1 [+ 2a +] 2a + 1$ $6a = 250$ $250 \div 6 = 41.6[\dots]$ oe or $250 \div 6$ is not an integer Alternative $81 + 82 + 83 = 246$ $83 + 84 + 85 = 252$ $82.3[3\dots] + 83.3[3\dots] + 84.3[3\dots]$ oe and impossible as not integer oe	1 1 1 1 1	Not from $a + 2a + 3a$ If 0 scored SC1 for one of $2a - 1$ or $2a + 1$ or $41.6[\dots]$ or $83.3[\dots]$ seen	First two numerical steps may be in reverse order and other sums may be seen (ignore)
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OCR Thursday 25 May 2017 – Morning (Calculator) Foundation Tier

42.

13	(a)		3 cao	1		
	(b)		1.5	3	M1 for 6×25000 soi by 150 000 or B1 for figs 15 or 1cm :0.25km and M1 for <i>their</i> $150000 \div 100 000$ or for <i>their</i> 0.25×6	
	(c)		$\frac{6}{13}$	1		

OCR Thursday 8 June 2017 – Morning (Non - Calculator) Foundation Tier

43.

19	(a)	22 : 15	2	M1 for any equivalent ratio or for two correct ratios with a common number of children seen implied by 22k and 15k seen ($k > 1$ and an integer) Or for $\frac{11}{3} : \frac{5}{2}$ or for 11 : 7.5	15k : 22k implies M1 Accept 3.66 to 3.67 : 2.5
	(b)	258	3	M2 for $\frac{36}{2} \times 5 + \frac{36}{3} \times 11$ [+36] oe or $((2 \times 11) + (3 \times 5)) \times 36 \div 6$ [+36] oe or $\frac{6}{6+15+22} \times x = 36$ oe or M1 for $\frac{36}{2} \times 5$ or $\frac{36}{2} \times 7$ soi or $\frac{36}{3} \times 11$ or $\frac{36}{3} \times 14$ soi oe	M2 implied by 222 [+36] not spoiled 90 + 132 [+36] Implied by 90 or 126 or 132 or 168 seen

OCR Sample Question Paper 1 – Morning/Afternoon (Calculator) Foundation Tier

44.

1	(a)	1 : 50	2 2 AO1.3a	M1 shows a partial simplification	e.g. 4 : 200
	(b)	50 300	2 2 AO1.3a	M1 for $350 \div (1 + 6)$	
	(c)	90	2 2 AO1.3a	M1 for $10\% = 45$ soi or M1 for 450×0.2	

OCR Sample Question Paper 3 – Morning/Afternoon (Calculator) Foundation Tier

45.

5		He has assumed he can run 800 m at the same speed as he can run 100 m, but he will run 800 m at a slower speed, therefore it will take him more than 120 s	3 1 AO2.1a 1 AO3.4a 1 AO3.5	B1 for correct reference to Darren's assumption OR $\frac{100}{15} = \frac{800}{120}$ soi B1 for 'his speed will be slower over 800 m' oe	
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AQA Tuesday 19 May 2020 – Morning (Non-Calculator) Foundation Tier

46.

Q	Answer	Mark	Comments	
5	20 or 12 or 10 : 6	B1	oe ratio check diagram for area counting to 20 or 12	
	5 : 3	B1ft	ft if B0 awarded, a correct and full simplification of any unsimplified ratio condone $\frac{5}{3} : 1$ or $1.6 : 1$ or $1 : \frac{3}{5}$ or $1 : 0.6$ SC1 3 : 5	
	Additional Guidance			
	5 : 3 with no working	B2		
	Ignore any units given with the answer			
	18 : 16 = 9 : 8 (perimeter)	B0B1ft		
Poor unit notation can score a maximum of B1 unless recovered 20 ² or 12 ² or 5 ² : 3 ²	B1B0			

47.

Q	Answer	Mark	Comments
24	Alternative method 1		
	2400 ÷ (3 + 5) or 2400 ÷ 8 or 300	M1	oe accept $\frac{1}{8}$ of 2400
	5 × their 300 or 1500 or 3 × their 300 or 900 or their 300 ÷ 6 or 50	M1dep	oe
	5 × their 300 ÷ 6 or (2400 – 3 × their 300) ÷ 6 or 1500 ÷ 6	M1dep	oe
	250	A1	
	Alternative method 2		
	2400 ÷ 6 or 400	M1	oe
	their 400 ÷ (3 + 5) or 50	M1dep	oe 2400 ÷ 48 scores M1M1
	5 × their 50 or 400 – (3 × their 50)	M1dep	oe
	250	A1	
	Additional Guidance		
	Answer 400 with 1500 or 900 in working		M1M1MOA0
	Answer 400 with 250 in working		M1M1M1A0
	Condone incorrect representation of a division if recovered eg 8 ÷ 2400 = 300		M1

AQA Thursday 4 June 2020 – Morning (Calculator) Foundation Tier

48.

Q	Answer	Mark	Comments
1	6 : 8	B1	

Q	Answer	Mark	Comments
18	Alternative method 1		
	14 × 0.8 or 11.2 or 1.5 × 2 ÷ 0.8 or 3.75	M1	oe implied by 8.2 or 5.4(6...) or 5.47 or 5.5
	their 11.2 – 2 × 1.5 or their 11.2 – 3 or 8.2 or (14 – their 3.75) × 0.8 or 8.2	M1dep	oe implied by 5.4(6...) or 5.47 or 5.5
	their 8.2 ÷ 1.5 or 5.4(6...) or 5.47 or 5.5 or 5 → 7.5 or 6 → 9 with M2 seen	M1dep	oe
	6 with 5.4(6...) or 5.47 or 5.5 seen or 6 with 5 → 7.5 and 6 → 9 and M2 seen	A1	
	Alternative method 2		
	14 × 0.8 or 11.2	M1	oe implied by 7.4(6...) or 7.47 or 7.5 (packs)
	their 11.2 ÷ 1.5 or 7.4(6...) or 7.47 or 7.5 (packs) or 7 → 10.5 or 8 → 12 with M1 seen	M1dep	oe $\frac{14 \times 0.8}{1.5}$ is M2
	their 7.4(6...) – 2 or 5.4(6...) or 5.47 or 5.5 or 7 – 2 or 8 – 2 with M2 seen	M1dep	oe
	6 with 7.4(6...) or 7.47 or 7.5 seen or 6 with 7 → 10.5 and 8 → 12 and M2 seen	A1	

Q	Answer	Mark	Comments
18 cont	Alternative method 3 Working in weeks		
	1.5 ÷ 0.8 or 1.875	M1	oe implied by 7.4(6...) or 7.47 or 7.5 (packs)
	14 ÷ their 1.875 or 7.4(6...) or 7.47 or 7.5 (packs) or 7 → 13.1(25) or 8 → 15	M1dep	oe
	their 7.4(6...) – 2 or 5.4(6...) or 5.47 or 5.5 or 7 – 2 or 8 – 2 with M2 seen	M1dep	oe
	6 with 7.4(6...) or 7.47 or 7.5 seen or 6 with 7 → 13.1(25) and 8 → 15 seen	A1	
	Additional Guidance		
	Select the scheme that favours the student for the first 2 M marks even if not subsequently used		
	Alts 2 and 3 the 7.5 must be packs not 7.5kg (from 5 × 1.5)		
	For the final mark of Alt 1, eg 5 → 7.5 and 0.7 (short) is sufficient evidence and there are equivalents for Alts 2 and 3		
	For the final mark of Alt 1, eg 6 → 9 and 0.8 (over) is sufficient evidence and there are equivalents for Alts 2 and 3		
Accept repeated addition or subtraction of 1.5 if clear eg 1.5 + 1.5 + 1.5 + 1.5 + 1.5 = 7.5 implies 5 → 7.5			

Q	Answer	Mark	Comments
21	Alternative method 1		
	30×8 or 240	M1	
	440 – their 240 or 200	M1dep	implied by 10 (medium) and 5 (large) or numbers of sweets in medium and in large totalling 200
	$12m + 16l$ where m and l are integers with $m = 2l$ or $12 \times 2 + 16$ or 120 (sweets in medium) and 80 (sweets in large) or 10 medium or 5 large	M1	eg $12 \times 6 + 16 \times 3$ or $72 + 48$ with 6 (medium) and 3 (large) shown medium or large may be implied
	30 : 10 : 5	A1	oe ratio eg 6 : 2 : 1
	Alternative method 2		
	30×8 or 240	M1	
	440 – their 240 or 200	M1dep	implied by 10 (medium) and 5 (large) or numbers of sweets in medium and in large totalling 200
	$12 \times 2x + 16x = \text{their } 200$ or $x = 5$ or $12y + 16 \times \frac{1}{2}y = \text{their } 200$ or $y = 10$	M1dep	oe equation in terms of large bags any letter oe equation in terms of medium bags any letter
	30 : 10 : 5	A1	oe ratio eg 6 : 2 : 1
	Additional Guidance		
	Ignore incorrect simplification if 30 : 10 : 5 seen		
	Answer 240 : 120 : 80		M1M1M1A0
Award up to M3 even if working not subsequently used			

51.

Q	Answer	Mark	Comments
	40 (women) and 44 (men) and No or 40 : 44 and No or 84 and No or 8 (women leave) and 2 (men arrive) and No	B2	oe B1 40 (women) and 44 (men) or 40 : 44 or 84 or 8 (women leave) and 2 (men arrive)
27	Additional Guidance		
	NB 84 from incorrect working eg $41 + 43 = 84$	B0	
	For B1 the values may be seen among others eg1 20 : 22 30 : 33 40 : 44 50 : 55 eg2 21, 42, 63, 84, 105, ... eg3 10, 20, 30, 40, 50, ... and 11, 22, 33, 44, 55, ... eg4 $\frac{44}{84}$ (implies 84)	B1	
	For B2 the value(s) must be chosen by eg circling or a list stopping at that point and No must be indicated		

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52.

Q	Answer	Mark	Comments
23	2 : 1	B1	

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53.

17(a)	28 : 12 or 14 : 6 or 56 ÷ 8 and 24 ÷ 8 (may be done in stages) or 3 and 7 seen	M1	
	7 : 3	A1	

17(b)	1.25 : 1	B1	oe eg $\frac{5}{4} : 1$
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17(c)	180 ÷ (1 + 9) or 18 or 162	M1	
	18 and 162	A1	
	Additional Guidance		
	162 and 18		M1A0
	Build-up method will score 2 or 0 eg 1 : 9 2 : 18 does not score M1 for 18		

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54.

22	Alternative method 1		
	8 ² or 64 and 17 ² or 289	M1	
	$\sqrt{17^2 - 8^2}$ or $\sqrt{225}$ or 15	M1dep	oe implies M2 may be seen on diagram
	8 × 3 × their 15 or 24 × their 15	M1dep	dep on M2 oe eg (8 + 16) × their 15 or 0.5 × 8 × their 15 × 6
	360	A1	SC2 [448.8, 456]
	Alternative method 2		
	$\cos C = \frac{8}{17}$ or C = [61.9, 62]	M1	may be seen on diagram
	17 × sin their [61.9, 62] or [14.9, 15.1]	M1dep	may be seen on diagram oe eg 8 × tan their [61.9, 62]
	8 × 3 × their [14.9, 15.1] or 24 × their [14.9, 15.1] or [357.6, 362.4]	M1dep	dep on M2 oe eg (8 + 16) × their [14.9, 15.1] or 0.5 × 8 × their [14.9, 15.1] × 6
	360	A1	SC2 [448.8, 456]
	Alternative method 3		
	$\sin A = \frac{8}{17}$ or A = [28, 28.1]	M1	may be seen on diagram
	17 × cos their [28, 28.1] or [14.9, 15.1]	M1dep	may be seen on diagram oe eg 8 + tan their [28, 28.1]
	8 × 3 × their [14.9, 15.1] or 24 × their [14.9, 15.1] or [357.6, 362.4]	M1dep	dep on M2 oe eg (8 + 16) × their [14.9, 15.1] or 0.5 × 8 × their [14.9, 15.1] × 6
	360	A1	SC2 [448.8, 456]

Alternative method and Additional Guidance continued on the next page

22 cont	Alternative method 4		
	$\cos C = \frac{8}{17}$ or $C = [61.9, 62]$	M1	may be seen on diagram
	$\frac{1}{2} \times 8 \times 17 \times \sin$ their $[61.9, 62]$ or $[59.9, 60.1]$	M1dep	oe
	$6 \times$ their $[59.9, 60.1]$ or $[357.6, 362.4]$	M1dep	oe
	360	A1	SC2 $[448.8, 456]$
	Additional Guidance		
	15 without a contradictory value for AB scores the first two marks on Alt method 1, even if not subsequently used		M1M1
	$\sqrt{17^2 + 8^2}$		M1M0
	3 rd M1 is for the total area and may be calculated in various ways eg using a trapezium + a triangle		
	3 rd M1 is for the total area so further work will lose the mark eg 360 seen followed by 360 – 60, answer 300		M1M1M0A0
May use sine rule or cosine rule but must reach $AB = \dots$ to award the second M1 in Alt 2 or 3			

55.

27	$(200 + 160 + 104 + 100) \div 4$ or $564 \div 4$ or 141	M1	
	their $141 \div 3 \times 8$ or 47×8 or $1128 \div 3$ or 376	M1dep	oe accept $141 \times 2.66(\dots)$ or 141×2.67
	their 376×5 or 1880	M1dep	
	427	A1	
	Additional Guidance		
	$(270 + 400 + 483 + 300 + 427) \div 5$ embedded answer		M1M1M1A0
	$(1453 + x) \div 5 = 376$ and $1453 + x = 1880$		M1M1M1
	$(1453 + x) \div 5 = 376$		M1M1M0
	$200 + 160 + 104 + 100 \div 4$ scores M0 unless recovered		

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56.

16	3 : 18 or 18 : 3 or $\frac{1}{3} : 1$ or $1 : \frac{1}{3}$ or 6×3	M1	oe both ratios correctly scaled so that the values for a are equal (ignore additional scaling) eg 6 : 36 and 6 : 2	
	18	A1		
	Additional Guidance			
	Do not accept words instead of ratios for M1			
	Accept embedded answers eg $b = 18c$			M1A1
	1 : 6 2 : 12 3 : 18 4 : 24 (etc)			M1
	18 – 3 (= 15)			M1A0

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57.

18(a)	8	B1	
	Additional Guidance		
	Ignore mention of bulls or cows eg condone 8 cows		B1
	Condone an answer of 8 : 240		B1
	8 : 240 followed by 1 : 30		B0
	8 : 30		B0
	Do not accept 8 from an incorrect method eg $240 \div 31 = 7.7\dots$ and answer 8		B0

18(b)	Alternative method 1		
	$[28, 31] \times 10$ or $[280, 310]$	M1	appropriate days in 10-month year
	their $[280, 310] \times 25$ or $[7000, 7750]$ or their $[280, 310] \times 240$ or $[67\ 200, 74\ 400]$	M1dep	litres per year per cow milkings per year for 240 cows
	their $[7000, 7750] \times 240$ or their $[67\ 200, 74\ 400] \times 25$	M1dep	
	$[1\ 680\ 000, 1\ 860\ 000]$ with correct working	A1	accept to 1 or 2 sf with correct working SC2 answer of $[2\ 016\ 000, 2\ 232\ 000]$ with the only error using 12 months and working shown
	Alternative method 2		
	25×240 or 6000	M1	litres per day for 240 cows may be seen embedded in a product eg $25 \times 10 \times 240$
	their $6000 \times [28, 31]$ or $[168\ 000, 186\ 000]$ or 25×240 or 6000 and $[28, 31] \times 10$ or $[280, 310]$	M1dep	litres per month for 240 cows litres per day for 240 cows and appropriate days in 10-month year
	their $[168\ 000, 186\ 000] \times 10$ or $25 \times 240 \times [28, 31] \times 10$ or their $6000 \times$ their $[280, 310]$	M1dep	
	$[1\ 680\ 000, 1\ 860\ 000]$ with correct working	A1	accept to 1 or 2 sf with correct working SC2 answer of $[2\ 016\ 000, 2\ 232\ 000]$ with the only error using 12 months and working shown

18(b) cont	Alternative method 3		
	[28, 31] × 25 or [700, 775]	M1	litres per month per cow
	their [700, 775] × 10 or [7000, 7750] or their [700, 775] × 240 or [168 000, 186 000]	M1dep	litres per year per cow litres per month for 240 cows
	their [7000, 7750] × 240 or their [168 000, 186 000] × 10	M1dep	
	[1 680 000, 1 860 000] with correct working	A1	accept to 1 or 2 sf with correct working SC2 answer of [2 016 000, 2 232 000] with the only error using 12 months and working shown
	Alternative method 4		
	[28, 31] × 240 or [6720, 7440]	M1	milking per month for 240 cows
	their [6720, 7440] × 10 or [67 200, 74 400] or their [6720, 7440] × 25 or [168 000, 186 000]	M1dep	milking per year for 240 cows litres per month for 240 cows
	their [67 200, 74 400] × 25 or their [168 000, 186 000] × 10	M1dep	
	[1 680 000, 1 860 000] with correct working	A1	accept to 1 or 2 sf with correct working SC2 answer of [2 016 000, 2 232 000] with the only error using 12 months and working shown

Additional Guidance continued on the next page

Additional Guidance		
18b cont	Use the scheme that awards the most marks and ignore choice	
	A value in the range [280, 310] may come from subtracting two months from a year eg uses 303 (may come from $365 - 31 - 31$)	M1
	The special case allows 2 marks for those using 12 months or using [336, 372] days	
	Allow consistent use of approximations to 1 sf throughout (this leads to an answer in the given range) ie $30 \times 10 \times 30 \times 200 = 1\,800\,000$	M3A1
	Mark inconsistent use of approximations to 1sf as the scheme	
	Their final answer must be in range and correct for their product but may be given to 1 or 2 sf	
	eg 280 days: $28 \times 10 \times 25 \times 240 = 1\,680\,000$ 300 days: $30 \times 10 \times 25 \times 240 = 1\,800\,000$ 310 days: $31 \times 10 \times 25 \times 240 = 1\,860\,000$ 303 days: $303 \times 25 \times 240 = 1\,818\,000$ 304 days: $304 \times 25 \times 240 = 1\,824\,000$ 305 days: $305 \times 25 \times 240 = 1\,830\,000$	M3A1
	eg 12 months of 28 days: $28 \times 12 \times 25 \times 240 = 2\,016\,000$ 12 months of 30 days: $30 \times 12 \times 25 \times 240 = 2\,160\,000$ 12 months of 31 days: $31 \times 12 \times 25 \times 240 = 2\,232\,000$ 365 days: $365 \times 25 \times 240 = 2\,190\,000$ 366 days: $366 \times 25 \times 240 = 2\,196\,000$	SC2

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58.

19(a)	Alternative method 1		
	$\frac{8}{5}$ and $\frac{5}{5}$ or any correct ratio using integers or $\frac{1.6}{1.6+1}$ or $\frac{1.6}{2.6}$	M1	oe fractions with common denominators eg 16 : 10
	$\frac{8}{13}$	A1	oe fraction eg $\frac{4000}{6500}$
	Alternative method 2		
	6500 ÷ (1.6 + 1) or 2500 or 6500 ÷ (1.6 + 1) × 1.6 or 4000 or $\frac{2500}{6500}$ or $\frac{5}{13}$ or $\frac{1}{2.6}$	M1	oe
	$\frac{8}{13}$	A1	oe fraction eg $\frac{4000}{6500}$
Additional Guidance			
19(b)	1 : 0.625 or 1 : $\frac{5}{8}$	B1	oe fraction
	Additional Guidance		
	0.625 in working 1 : 0.6		B0

AQA Thursday 24 May 2018 – Morning (Non-Calculator) Foundation Tier

59.

22	$24 \times \frac{3}{4}$ or $24 \div 4 (\times 3)$ or $6 (\times 3)$ or 18 or 18 : 6	M1	oe
	30 : 6	A1	
	5 : 1	B1ft	ft their ratio written in simplest form
	Additional Guidance		
	15 : 3 or 10 : 2		M1A1B0
	answer 1 : 5 answer 6 : 30		M1A0B1ft M1A0B0ft
	18 : 24 then 3 : 4		M1A0B1ft

AQA Thursday 24 May 2018 – Morning (Non-Calculator) Foundation Tier

60.

24	$405 \div (4 + 11)$ or $405 \div 15$ or 27 or build up in 15s to 405	M1	Clear intention to divide Do not accept $15 \div 405$ unless clearly recovered
	their 27×4 or 108 or their 27×11 or 297	M1dep	
	108 and 297	A1	
	Additional Guidance		
	297 and 108		M1M1A0
	Answer 108 : 297		M1M1A1
	Partial build up using ratios from 4 : 11 (eg 104 : 286) is 0 marks unless correct answer achieved		M0M0A0
If 405 is divided by 10 and then divided by 5 this is M0 unless $405 \div 15$ was clearly seen first, then it is M1M0A0			

AQA Thursday 7 June 2018 – Morning (Calculator) Foundation Tier

61.

20	2.5	B1	
	Additional Guidance		

AQA Thursday 7 June 2018 – Morning (Calculator) Foundation Tier

62.

26	Alternative method 1		
	22.5(0) and 4 or 27 and 8 or 31.5(0) and 12 or 36 and 16 or 40.5(0) and 20 or 45 and 24 or 30 : 16 or 45 : 24	M1	
	45 and 24 chosen	A1	eg 45 : 24 is the final ratio seen
	6	A1	

Mark scheme and additional guidance continues on the next page

26 cont	Alternative method 2		
	18 + 4.5x and 4x seen or $\frac{18 + 4.5x}{15} = \frac{4x}{8}$	M1	any letter oe sets up correct equation
	8(18 + 4.5x) = 60x or 144 + 36x = 60x or 24x = 144	M1dep	eliminates denominators oe
	6	A1	
	Additional Guidance		
	Answer 6 that is not from incorrect method		M1A1A1
	45 and 24 followed by eg 49.5(0) and 28 (answer not 6)		M1A0A0
	Equivalent ratio to 15 : 8 that is not 30 : 16 or 45 : 24 eg 60 : 32 (answer not 6)		M0A0A0
	Final calculation $\frac{15}{8} \times 24 = 45$ (answer not 6)		M1A1A0

AQA Thursday 2 November 2017 – Morning (Non-Calculator) Foundation Tier

63.

11a	$\frac{2}{5}$	B1	
	Additional Guidance		

11b	$\frac{5}{9} \times 72$ or 8×5 or $360 \div 9$	M1	oe eg multiples of 8 listed and 5 th one chosen with maximum one error
	40	A1	SC1 32
	Additional Guidance		
	$\frac{40}{72}$		M1A0
	40 out of 72		M1A1

AQA Monday 6 November 2017 – Morning (Calculator) Foundation Tier

64.

19a	120 ÷ (1 + 4) or 120 ÷ 5 or 24 or 96	M1	oe
	24 : 96	A1	in order
	Additional Guidance		
	96 : 24		M1A0
	120 ÷ 5 and 120 ÷ 4 is choice unless intention is clear		M0A0
	Further cancelling after 24 : 96 seen eg 1 : 4		M1A0

19b	1.75 : 1 or $1\frac{3}{4} : 1$ or $\frac{7}{4} : 1$	B1	
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AQA Thursday 25 May 2017– Morning (Non-Calculator) Foundation Tier

65.

15	Alternative method 1		
	8 × 2 or 16	M1	implied by 8 : 16
	their 16 + 8 or 24	M1dep	8 × 3
	48	A1	
	Alternative method 2		
	(1 + 2 = 3) 3 + 3 or 6	M1	
	their 6 × 8	M1dep	their 6 must be from 3 + 3
	48	A1	
	Additional Guidance		
	Beware 24 coming from incorrect working eg Misread of 8 girls who do not sing in the show, leading to answer of 24		M1M1A0

AQA Thursday 8 June 2017– Morning (Calculator) Foundation Tier

66.

16	1 : 4	B1	
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AQA Thursday 8 June 2017– Morning (Calculator) Foundation Tier

67.

19	Alternative method 1 (hits and misses)	
	A counter example using both ratios or using numbers of hits and misses for both players	B2 eg Katy could be 6 : 2 and Ben hit 5 eg Ben 10 hits and 2 misses and Katy 12 hits and 4 misses B1 for a correct number of hits and misses (not 3 and 1) or a correct equivalent ratio for Katy
	Alternative method 2 (hits and total throws or proportion of hits)	
	A counter example using total throws and number of hits for both players or using proportion of hits for both players	B2 eg Katy could have hit 6 out of 8, Ben hit 5 eg Katy could have $\frac{18}{24}$ and Ben $\frac{10}{12}$ B1 for a correct number of total throws and hits (not 3 out of 4) or a correct proportion of hits (not $\frac{3}{4}$) for Katy
	Additional Guidance	
	Must use the given ratios	
	(Ben) 5 : 1 (Katy) 6 : 2	B2
	15 : 3 and 15 : 5 (so the same hits)	B2
	(Katy) 6 : 2 or (Katy) 6 hits and 2 misses	B1
	List of equivalent ratios for (Ben and) Katy with no counter example chosen	B1
15 : 3 and 9 : 3	B1	
Fractions of hits out of total throws or percentages or decimals or words		
eg $\frac{5}{6}$ and $\frac{3}{4}$	B0	
eg $\frac{20}{24}$ and $\frac{18}{24}$	B1	
eg $\frac{5}{6}$ and $\frac{6}{8}$	B2	
Ben had (two) more throws – he had 6 and she had 4	B0	

AQA Tuesday 13 June 2017 Morning– Morning (Calculator) Foundation Tier

68.

17(a)	<i>E</i> marked at midpoint of line	B1	mark intention
	Additional Guidance		
	Accept any clear marking of the point		

17(b)	<i>R</i> marked 3 cm from <i>P</i>	B1	mark intention
	Additional Guidance		
	Accept any clear marking of the point		

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69.

21	Alternative method 1		
	Any correct scaling of the ratio 5 : 2 eg 10 (:) 4 or 20 (:) 8 or 25 (:) 10	M1	oe
	22.5 (:) 9 or 22.5 (red) or 30 (:) 12 or 12 (blue)	M1dep	oe
	31.5 or $31\frac{1}{2}$ or $\frac{63}{2}$	A1	
	Alternative method 2		
	9 + 2 or 4.5 or 30 + 5 or 6	M1	oe 2 + 9 or 0.22... 5 + 30 or 0.16... or 0.17
	5 × their 4.5 or 22.5 or 7 × their 4.5 or 2 × their 6 or 12 or 7 × their 6 or 42	M1dep	oe
	31.5 or $31\frac{1}{2}$ or $\frac{63}{2}$	A1	
	Alternative method 3		
	$\frac{2}{7}$ × purple = blue $\frac{5}{7}$ × purple = red	M1	oe $\frac{2}{7}$ × purple = 9 $\frac{5}{7}$ × purple = 30
	$9 \times \frac{7}{2}$ or $30 \times \frac{7}{5}$ or 42	M1dep	oe
	31.5 or $31\frac{1}{2}$ or $\frac{63}{2}$	A1	

Additional Guidance continues on the next page

		Additional Guidance	
21 cont		$28 + 3.5 = 31.5$	M1M1A1
		$28 + 3.5$	M1M1A0
		31.5, answer 31	M1M1A1
		$31.5 + 42 = 73.5$	M1M1A0
		10 4	M1M0A0
		10, 4	M1M0A0
		$10 + 4$	M1M0A0
		'He has 2.5 times more red than blue'	M1M0A0
		2.5 : 1	M1M0A0
		2.5	M0M0A0
		28 on its own	M0M0A0

AQA Sample Paper 1– Morning (Non-Calculator) Foundation Tier

70.

13(a)	28	B1	
13(b)	6	B1	

AQA Sample Paper 1– Morning (Non-Calculator) Foundation Tier

71.

28	Alternative method 1		
	$18 \div (3 + 2)$ or 3.6	M1	
	their $3.6 \times 3 \times 2.8(0)$ or 30.24(0)	M1dep	
	their $3.6 \times 2 \times 3.5(0)$ or 25.2(0)	M1dep	dep on first M1
	55.44	A1	
	Alternative method 2		
	$3 \times 2.8(0) + 2 \times 3.5(0)$ or 15.4(0)	M1	
	$18 \div (3 + 2)$ or 3.6	M1	
	their $3.6 \times$ their 15.4(0)	M1dep	dep on M1 M1
	55.44	A1	
	Alternative method 3		
	$3 \times 2.8(0) + 2 \times 3.5(0)$ or 15.4(0)	M1	
	their $15.4(0) \div 5$ or 3.08	M1dep	
	their 3.08×18	M1dep	
	55.44	A1	

AQA Sample Paper 2– Morning (Calculator) Foundation Tier

72.

28	Alternative method 1		
	2 parts \rightarrow 116	M1	oe
	$116 \div 2 \times 16$	M1	oe
	928	A1	
	Alternative method 2		
	Writes at least 3 ratios or numbers of boys and girls equivalent to 9 : 7	M1	eg 18 : 14 and 180 : 140 and 360 : 280
	522 and 406	M1	
	928	A1	

AQA Sample Paper 3– Morning (Calculator) Foundation Tier

73.

12(a)	$\frac{1}{3.5}$	M1	
	$\frac{2}{7}$	A1	oe fraction
12(b)	Alternative method 1		
	$120\,000 \times (1 + 2.5)$	M1	
	420 000	A1	
	Alternative method 2		
	$120\,000 \div \frac{\text{their 2}}{\text{their 7}}$ or $120\,000 \div \frac{\text{their 1}}{\text{their 3.5}}$	M1	where fraction in (a) is of the form $\frac{m}{n}$, $m > 1$ where fraction in (a) is of the form $\frac{1}{n}$
420 000	A1ft	ft their answer from part (a)	