Paper: 1MA1/2F				
Question	**Working**	**Answer**	**Mark**	**Notes**
6 (a) **Q1**		$\frac{3}{7}$	B1	for $\frac{3}{7}$ or equivalent fraction
(b)		3 : 1	B1	for 3 : 1 or equivalent ratio

Paper: 1MA1/2F				
Question	**Working**	**Answer**	**Mark**	**Notes**
11 **Q2**		5 : 2 : 10	P1	for process to calculate total for quiz or total of membership fees eg. 13 × 5 + 35 (=100), 25 × 20 (=500)
			P1	for complete process to write (correct) figures as a ratio, eg 250 : 100 : 500 oe in any order (condone inclusion of units or words)
			A1	cao

Paper: 1MA1/1F				
Question	**Working**	**Answer**	**Mark**	**Notes**
10 **Q3**		1 : 10	M1 A1	for 12 : (20 × 6) oe **or** 10 : 1 **or** 1 with 10 in incorrect notation cao

Paper: 1MA1/3F				
Question	**Working**	**Answer**	**Mark**	**Notes**
5 (a)		1 : 3	B1	oe
(b) **Q4**		42	M1 A1	ft 56 ÷ 4 (= 14) or complete method to find number of grey tiles eg 56 – (56 ÷ 4), 56 ÷ 4 × 3 oe (= 42) for 42 or ft

Paper: 1MA1/3F				
Question	**Working**	**Answer**	**Mark**	**Notes**
10 **Q5**		75	P1 P1 A1	for 90 ÷ 6 (= 15) or for connecting *AB* and *BC* by ratio or proportion eg 5 and 1 on the diagram for a complete method to find the length *AB* eg 90 ÷ 6 × 5 (= 75) cao

Paper: 1MA1/3F				
Question	**Answer**	**Mark**	**Mark scheme**	**Additional guidance**
16 **Q6**	30:1	M1 A1	for stating 450 : 15 oe **or** 450 ÷ 15 (=30) oe **or** 1 : 30 cao	90 : 3 Ignore units throughout.

Paper: 1MA1/1F				
Question	**Answer**	**Mark**	**Mark scheme**	**Additional guidance**
14 **Q7**	Isabel (supported)	P1 P1 A1 C1	for process to work with $\frac{3}{4}$ eg $1-\frac{3}{4}$ ($=\frac{1}{4}$) oe, eg 25% or $\frac{25}{100}$ **or** $\frac{3}{4}$ = 75% or $\frac{75}{100}$ **or** value of salary (say 1000) × 3 ÷ 4 (= 750) for process to work with ratio 3 : 7 eg $\frac{3}{3+7}$ oe **or** $\frac{7}{3+7}$ oe **or** value of salary (say 1000) ÷ (3+7) (= 100) for (28(%)), 25(%) and 30(%) **or** 72(%), 75(%), 70(%) **or** 0.28, 0.25, 0.3 **or** for using value of salary (say 1000) giving 280, 250, 300 **or** 720, 750, 700 (dep P2) for Isabel or ft their comparative values	 "Isabel" alone without supported evidence, gets 0 marks.

Paper: 1MA1/1F				
Question	**Answer**	**Mark**	**Mark scheme**	**Additional guidance**
17 **Q8**	1 : 3	M1 A1	for $\frac{1}{4}:\frac{3}{4}$ oe **OR** for any correct un-simplified ratio, eg 25 : 75 cao SC: B1 for an answer of 3 : 1 or 1 : $\frac{1}{3}$ if M0 scored	 Ignore 'units' such as 1 nuts : 3 no nuts 1 : 3*n* gets M1A0

Paper: 1MA1/3F				
Question	**Answer**	**Mark**	**Mark scheme**	**Additional guidance**
16 (a)	10	M1	for a start of method to find Bispah's share, eg 2.50×8 (= 20) **or** $\frac{1}{2} \div \frac{1}{8}$ (= 4)	
		A1	cao	Accept 10.00
(b)	1 : 3	P1	for a process to find Chan's share, eg "20" – 2.5 – [Bispah's money] (=7.5) **or** $1 - \frac{1}{8} - \frac{1}{2}$ $(= \frac{3}{8})$	Accept working in pence, or in £ given as a decimal oe NB: award this mark if the working is seen in part (a)
Q9		P1	for a correct ratio eg 2.5 : "7.5" **or** $\frac{1}{8}$: "$\frac{3}{8}$" **or** 3 : 1 oe	Accept 3:1 (correct answer in reverse order) which can also be an equivalent ratio to 3:1
		A1	for 1 : 3 oe eg 5 : 15	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.

Paper: 1MA1/3F				
Question	**Answer**	**Mark**	**Mark scheme**	**Additional guidance**
6 **Q10**	3 : 5	B1	for 3 : 5 or for any other equivalent ratio	

Paper: 1MA1/2F				
Question	**Answer**	**Mark**	**Mark scheme**	**Additional guidance**
14 **Q11**	2 : 1	B1	cao	

Paper: 1MA1/3F				
Question	**Answer**	**Mark**	**Mark scheme**	**Additional guidance**
12 **Q12**	$\frac{9}{25}$	M1 A1	for $\frac{n}{6+9+10}$ where n is an integer < 25 for $\frac{9}{25}$	Or equivalent fraction

Paper: 1MA1/1F				
Question	**Answer**	**Mark**	**Mark scheme**	**Additional guidance**
9 (a)	$\frac{3}{7}$	B1	o	
(b)	1 : 2.5	M1	for appropriate method shown eg 30 ÷ 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	
Q13		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

Paper: 1MA1/3F				
Question	**Answer**	**Mark**	**Mark scheme**	**Additional guidance**
12 **Q14**	1 : 6 : 3	M1 A1	for any two algebraic statements from x, $6x$, $6x/2$ oe **or** any two numbers as a correct ratio eg 1 : 6 or 6 : 3 or 1 : 3 oe **or** any 3-term ratio using the numbers 1, 6 and 3 oe	 For any equivalent ratio.

Paper: 1MA1/3F				
Question	**Answer**	**Mark**	**Mark scheme**	**Additional guidance**
22 **Q15**	Description	C1	Identifies a mistake in the working **Acceptable examples** Rob should divide by 8 He should have added the 3 and 5 first He divided 120 by 3 and 5 instead of 8 He did not do it as $120 \times \frac{3}{8}$ and $120 \times \frac{5}{8}$ He did not add the two ratios first **Not acceptable examples** He has done it in two parts but he should do it in one The answer should be 45 : 75 They do not add up to 120 He is supposed to add his numbers 40 + 24 does not equal 120	

Paper 1MA1: 1F				
Question	**Working**	**Answer**	**Mark**	**Notes**
15 **Q16**		45	M1 A1	for a correct first step eg $\frac{9}{7+4+9}$ ($=\frac{9}{20}$) **or** $\frac{100}{7+4+9}$(=5) **or** a full method for one of the other colours cao

Paper 1MA1: 1F				
Question	**Working**	**Answer**	**Mark**	**Notes**
18 **Q17**		135	M1 A1	for 450 ÷ "2+3+5" (=45) **or** $\frac{3}{}\times$ 450 (=135) **or** 5 parts are 225 **or** 2 parts are 90 indicated Cao

Paper 1MA1: 1F				
Question	**Working**	**Answer**	**Mark**	**Notes**
24 **Q18**		14:21:42	P1 P1 P1 A1	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 (dep) for sum of their 3 expressions =77 eg $x + x$+7+2x+14 =77 oe **or** 2 systematic correct trials including addition for a correct process to isolate their term in x **or** x=14 for ratio 14:21:42 oe

Paper: 1MA1/3F				
Question	**Working**	**Answer**	**Mark**	**Notes**
15 **Q19**		(£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 ÷ 2 × 9 (= (£)27) or a correct entry in the table. demonstrates a proportional method to find at least one cost for silk, eg. £6 ÷ 2 × 5 (= (£)15) or a correct entry in the table. for a fully correct table (accept 67.5(0))

Paper: 1MA1/3F				
Question	**Working**	**Answer**	**Mark**	**Notes**
22 **Q20**		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

Paper: 1MA1/3F				
Question	**Working**	**Answer**	**Mark**	**Notes**
18 **Q21**		68	P1 P1 P1 P1 A1 OR P1 P1 P1 P1 A1	for a process to find the number of vanilla cakes, eg 420 × 2 ÷ 7 oe (= 120) for a process to find the number of banana cakes, eg 420 × 0.35 oe (= 147) (dep P1) for a full process to find the number of lemon/chocolate cakes eg 420 – (vanilla cakes) – (banana cakes) (= 153) (dep on previous P1) for a process to find the number of lemon cakes eg "153" ÷ 9 × 4 oe (= 68) cao for writing two proportions in the same format for combining the proportions of vanilla and banana cakes eg 2/7 + 7/20 (= 89/140) (dep P1) for a full process to find the proportion or number of lemon/chocolate cakes eg 1 – "89/140" (= 51/140) (dep on previous P1) for a process to find the number of lemon cakes eg "51/140" × 420 ÷ 9 × 4 (= 68) cao

Paper: 1MA1/1F				
Question	**Answer**	**Mark**	**Mark scheme**	**Additional guidance**
13 **Q22**	4 : 1 : 2	M1 A1 (SCB1	for start to express the statements as a ratio eg 4 : 1, 1 : 4, 1 : 2 or 2 : 1 with clear and correct link to Azmol, Ryan, Kim **OR** as algebraic expressions, two of $4x$, x and $2x$ eg $4x : x$, $1x : 4x$, $1x : 2x$ or $2x : 1x$ with clear and correct link to Azmol, Ryan, Kim 4 : 1 : 2 oe 3 integer numbers in correct ratio but no ratio notation, eg 4, 1, 2 or 20, 5, 10)	Allow any equivalent ratio, integers only May be seen as part of an incorrect answer. May be seen as integer multiples of these algebraic expressions. Any letter may be used. Accept 8 : 2 : 4 or equivalent ratios involving integers

Paper: 1MA1/1F				
Question	**Answer**	**Mark**	**Mark scheme**	**Additional guidance**
20 **Q23**	140	P1 P1 A1	for beginning to solve the problem eg 50 ÷ 5 × 8 (= 80) **or** 14 : 8 : 5 oe **or** 14 : 8 and 8 : 5 oe (linked) for a full process to solve the problem eg "80" ÷ 4 × 7 **or** $\frac{50}{5}$ × "14" **or** 140 : 80 : 50 cao	80 may be seen in the ratio 80 : 50 If 140 clearly identified as houses in working award full marks

Paper: 1MA1/2F				
Question	**Answer**	**Mark**	**Mark scheme**	**Additional guidance**
23 **Q24**	3 : 5	P1 P1 P1 P1 A1	for process to find 20% **or** 120% of the cost, eg 8500 × 0.2 (= 1700) oe **or** 8500 × 1.2 (= 10 200) oe for process to find total cost of payments, eg 12 × 531.25 (= 6375) for complete process to find value of deposit, eg "10 200" – "6375" (= 3825) **or** 8500 – "6375" (=2125) **and** "2125" + "1700" (=3825) **OR** the deposit as a proportion of the total cost, eg $1 - \frac{"6375"}{"10200"}$ $(=\frac{3}{8})$ for finding a correct un-simplified ratio, eg "3825" : "6375" oe **or** 5:3 **or** 1.$\dot{6}$: 1 **or** $\frac{5}{3}$: 1 Accept 1: 1.$\dot{6}$, 1: $\frac{5}{3}$	When partitioning all figures quoted must be correct or a full method shown eg 10% = 8500 ÷ 10 (=850) and 20% = "850" + "850" (=1700) May be seen as a fraction of the total eg $\frac{3825}{10200}$ $(=\frac{3}{8})$ Figures at this stage must be expressed as part of a ratio eg 51:85, $\frac{3}{8} : \frac{5}{8}$ Ignore consistent units

Pape: 1MA1/1F				
Que. tion	**Answer**	**Mark**	**Mark scheme**	**Additional guidance**
21 **Q25**	2 (supported)	P1 P1 P1 A1	for a process to find the number of men, eg. (60 ÷ 2) ÷ 3 (= 10) for a process to find the number of children, eg. 60 – "30" – "10" (= 20) for a start of a process to find the value of *n*, eg. ("20" : "10") ÷ 5 or 20 : 10 = 10 : 5 or "20" ÷ "10" for 2 with supportive working	 60 ÷ 3 = 20 scores no marks. Any ratio must come from correct processes to find the number of children and the number of men Award 0 marks for 2 with no correct supportive working Award full marks for 2 : 1 given as final answer from correct supportive working

Paper: 1MA1/2F				
Question	**Answer**	**Mark**	**Mark scheme**	**Additional guidance**
23 **Q26**	18	P1 P1 P1 A1	for 240 ÷ 10 (= 24) **or** 240 ÷ 8 (= 30) for 3 × "24" (= 72) **or** 7 × "24" (= 168) **or** 3 × "30" (= 90) **or** 5 × "30" (= 150) for 3 × "24" (= 72) **and** 3 × "30" (= 90) **or** 7 × "24" (= 168) **and** 5 × "30" (= 150) cao	Accept 3 + 7 for 10, 3 + 5 for 8

Paper: 1MA1/1F				
Question	**Answer**	**Mark**	**Mark scheme**	**Additional guidance**
27 **Q27**	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** $\frac{"24"}{"14"+"15"+"24"} \times 212$	P3 can be implied by the values 56, 60 and 96
		A1	cao	

Paper: 1MA1/2F				
Question	**Answer**	**Mark**	**Mark scheme**	**Additional guidance**
26 **Q28**	168	P1 P1 P1 A1	for working with ratio to find the amount for C or D eg. 1.5 × 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 for "2 + 3 + 3 + 7" (=15) **OR** adds 4 suitable expressions, eg. "x + 3.5x + 1.5x + 1.5x" (= 7.5x) for a complete process to find the amount of money eg. 360 ÷ "15"× 7 **OR** 360 ÷ "7.5" × 3.5 cao	

Paper: 1MA1/3F				
Question	**Answer**	**Mark**	**Mark scheme**	**Additional guidance**
23 **Q29**	612	P1 P1 P1 P1 A1	Alan: for 100 − 32 – 40 (= 28) or for finding "28"% of 400 eg 400 × 0.28 (=112) Beryl: for $1-\frac{3}{10}-\frac{1}{10}\left(=\frac{6}{10}=60\%\right)$ or for finding $"\frac{6}{10}" \times 500$ (=300) Charlie: for starting to use the ratio 3 : 4 eg 150 ÷ 3 (=50) for complete ratio process eg $"\frac{150}{3}" \times 4$ (=200) cao	 Answers only (without working) award 0 marks.

Paper: 1MA1/1F				
Question	**Answer**	**Mark**	**Mark scheme**	**Additional guidance**
29 **Q30**	6 : 15 : 20	P1	chooses a multiplier to equate the two fractions in terms of b eg $\frac{2}{5}\times\frac{3}{3}\left(=\frac{6}{15}\right)$ **or** $\frac{3}{4}\times\frac{5}{5}\left(=\frac{15}{20}\right)$ **or** lists equivalent fractions to $\frac{2}{5}$ up to at least $\frac{6}{15}$, eg. $\frac{2}{5},\frac{4}{10},\frac{6}{15},\ldots..$ **or** lists equivalent fractions to $\frac{3}{4}$ up to at least $\frac{15}{20}$, eg. $\frac{3}{4},\frac{6}{8},\frac{9}{12},\frac{12}{16},\frac{15}{20},\ldots..$ **or** (a : b =) 2 : 5 **and** (b : c =) 3 : 4 **or** for 6 : 15 or 15 : 20 seen	
		P1	puts into related terms ready for ratio eg $\frac{2}{5}\times\frac{3}{3}=\frac{6}{15}$ **and** $\frac{3}{4}\times\frac{5}{5}=\frac{15}{20}$ **or** for (a : b =) 6 : 15 **and** (b : c =) 15 : 20 **or** lists equivalent ratios up to a common element for b, eg a : b = 2 : 5, 4 : 10, 6 : <u>15</u> **and** b : c = 3 : 4, 6 : 8, 9 : 12, 12 : 16, <u>15</u> : 20	Need not be written in ratio form
		A1	for 6 : 15 : 20 oe	Accept equivalent ratios Accept a = 6. b = 15 and c = 20

Paper: 1MA1/2F				
Question	**Answer**	**Mark**	**Mark scheme**	**Additional guidance**
20 **Q31**	1.75	P1 P1 P1 A1	for an initial process eg 1.80 ÷ 12 (=0.15) or 1.80 ÷ 3 (=0.6) for a correct second step eg “0.15” ÷ 3 (=0.05) or “0.6” × 7 (=4.2) or 3÷ “0.15”(=20) or 7 ÷ 3 (=2.3..) or “0.15” × 7 (=1.05) for finding the price of one pen eg-“0.05” × 7 (=0.35) or “4.2” ÷ 12 (=0.35) or 7 ÷ “20”(=0.35) or “2.3.... × “0.15” (=0.35) or “1.05” ÷ 3 (=0.35) cao	Accept 1.8 ÷ 12 = 15 (p) They can work in pounds or pence

Paper: 1MA1/2F				
Question	**Answer**	**Mark**	**Mark scheme**	**Additional guidance**
23 **Q32**	No (supported)	P1 P1 P1 P1 C1	for 3000 ÷ (2 + 3) (= 600) for "600" × 2 (= 1200) **or** "600" × 3 (= 1800) **or** "600" ÷ 6 (= 100) **or** "600" ÷ 20 (= 30) for "1200" ÷ 6 (= 200) **or** "1800" ÷ 20 (= 90) **or** "100" × 2 (= 200) **or** "30" × 3 (= 90) for "90" ÷ ("200" + "90") × 100 (= 31.0...) oe **or** "90" ÷ ("200" + "90") (= 0.31...) **or** 0.3 × ("200" + "90") (= 87)oe correct conclusion **and** fully correct calculations with accurate figure eg No and 87 **or** No and 31% **or** No and 0.31	 Full method to compare No may be implied by a statement No working, answer only no marks

Paper: 1MA1/1F				
Question	**Answer**	**Mark**	**Mark scheme**	**Additional guidance**
12 **Q33**	Yes, supported by correct working	P1 P1 A1	for 36 : 48 oe **OR** $\frac{36}{84}$ oe **or** $\frac{48}{84}$ oe for $\frac{4}{7}$ **or** 3 : 4 oe (for group 2) **OR** ($\frac{36}{84}=\frac{3}{7}$) **or** ($\frac{48}{84}=\frac{4}{7}$) **or** 84 × 3 ÷ 7 (= 36 boys) **or** 84 × 4 ÷ 7 (= 48 girls) **or** N × 3 ÷ 7 and N × 4 ÷ 7 for Yes with both ratios 3 : 4 oe **or** for a correct pair of fractions and stating they are equivalent.	Relating to drama group 1 Relating to drama group 2 N can be any number (other than 84) of students in the 2nd group Both equivalent forms of the ratios (fractions) must be the same "Yes" may be implied from working

Paper: 1MA1/1F				
Question	**Answer**	**Mark**	**Mark scheme**	**Additional guidance**
24 **Q34**	33	P1 P1 A1	for relating 24 to 8 parts, **or** (1 part =) 24 ÷ 8 (= 3) **or** 15 – 7 (= 8) **or** starts to use a build-up method, eg (8 :) 14 : 30 for (15 – 4) **and** (24 ÷ 8) **or** 15 × 3 (= 45) **and** 4 × 3 (= 12) **or** for 12 (: 21) : 45 cao	8 parts = 24

Paper: 1MA1/3F				
Question	**Answer**	**Mark**	**Mark scheme**	**Additional guidance**
13 (a) **Q35**	40	M1 A1	2 ÷ (2+3) × 100 (=40) or build up to (and shows) 40:60 oe **or** for sight of $\frac{2}{5}$ oe **or** 100 ÷ 5 (=20) cao	
(b)	20 : 80	M1 A1	100 − 20 (=80) or 80 : 20 oe 20 : 80 oe	Accept any equivalent ratio; award full marks if an acceptable ratio is given and then incorrectly simplified.

Paper: 1MA1/3F				
Question	**Answer**	**Mark**	**Mark scheme**	**Additional guidance**
22 **Q36**	12.85 or 12.86 or 13.5(0)	P1 P1 P1 A1	for 9 + 2 + 1 (=12) for working out how many lots of 175g are needed eg 6000 ÷ "12"× 2 ÷ 175 (=5.71..) for a complete process eg "5.71…" × 2.25 (=12.857..) for 12.85 or 12.86 or 13.5(0)	Award this mark for sight of 4500, 1000 or 500 Process may lead to 5 or 6 instead of 5.71 "5.71…" (ft) or a figure rounded or truncated eg "6"

Paper: 1MA1/1F				
Question	**Answer**	**Mark**	**Mark scheme**	**Additional guidance**
18 **Q37**	60	P1	for 240 ÷ (5 + 3 + 2) (= 24)	
		P1	for complete process to find the number of cans of each drink eg 5 × "24" (= 120) and 3 × "24" (= 72) and 2 × "24" (= 48)	
		P1	for process to find the number of cans removed eg "72" ÷ 2 (= 36) and "48" ÷ 12 (= 4)	
		P1	for process to find percentage eg $\frac{"120"}{240-("36"+"4")} \times 100$ or $\frac{"120"}{"120"+("72"-"36")+("48"-"4")} \times 100$	
		A1	cao	
			Alternative	
		P1	for process to find proportion of lemonade and orange cans removed, eg $3 \times \frac{1}{2}$ (= $1\frac{1}{2}$) and $2 \times \frac{1}{12}$ (= $\frac{1}{6}$)	
		P1	for process to find proportion of lemonade and orange cans remaining, eg $3 - "1\frac{1}{2}" + 2 - "\frac{1}{6}"$ (= $3\frac{1}{3}$)	
		P1	for $5 + "3\frac{1}{3}"$ (= $8\frac{1}{3}$)	
		P1	for process to find percentage eg $(5 \div "8\frac{1}{3}") \times 100$	
		A1	cao	

Paper: 1MA1/1F				
Question	**Answer**	**Mark**	**Mark scheme**	**Additional guidance**
24 (a)(i)	2 : 6 : 5	P1	for process to compare ratios, eg $a : b = 2 : 6$ or $b : c = 3 : 2.5$	Could use 3 or any common multiple of 3 and 6
		A1	for 2 : 6 : 5 oe	
(ii)	$\frac{2}{13}$	M1	for process to find fraction, eg $\frac{[2]}{[2+6+5]}$ or for $\frac{a}{a+b+c}$	
		A1	for $\frac{2}{13}$ oe or ft (a)(i)	
(b)	1 : 10	P1	for process to express all numbers in terms of one number, eg $p = 5 \times 2m$ (= $10m$) or $m = \frac{n}{2}$ **or** for $2m = \frac{p}{5}$ **or** for assigning values in the ratio given, eg $m = 1$, $n = 2$, $p = 10$ **or** for $n : m : p = 2 : 1 : 10$ oe **or** 10 : 1 oe	
		A1	for 1 : 10 oe	

Q38

Paper: 1MA1/1F				
Question	**Answer**	**Mark**	**Mark scheme**	**Additional guidance**
25 **Q39**	30	P1 P1 P1 P1 A1	for 160 ÷ (3+7) (= 16) **or** $\frac{3}{3+7}$ (= $\frac{3}{10}$) for "16" × 3 (= 48) **or** "$\frac{3}{10}$" × 160 (= 48) for a correct step using 48 eg "48" ÷ 8 (= 6) **or** "48" × 25 ÷ 100 (= 12) **or** (indep) for combining $\frac{1}{8}$ and 25%, eg $\frac{1}{8} + \frac{1}{4}$ (= $\frac{3}{8}$) or "0.125" + "0.25" (= 0.375) or "12.5"(%) + 25(%) (= 37.5(%)) for a complete process to find the number of petrol cars, eg "48" – "6" – "12" oe **or** (1 – "$\frac{3}{8}$") × "48" oe **or** $\frac{3}{10}$ × (1 – "$\frac{3}{8}$") × 160 oe cao SC B2 for an answer of 100 if P0 scored	 Award no marks for a correct answer with no supportive working

Paper: 1MA1/3F				
Question	**Answer**	**Mark**	**Mark scheme**	**Additional guidance**
24 **Q40**	1.5	P1 P1 P1 P1 A1	for process to develop 3 algebraic expressions, eg. (R =) n, (S =) $2n$, (T =) $2n – 6$, oe, at least two must be correct. **or** for selecting 3 values satisfying the given criteria, eg. (R =) 10, (S =) 20, (T =) 14 for process to sum 3 algebraic expressions and equating to 54, eg. n + "$2n$" + "$2n – 6$" = 54 **or** for finding the correct sum of their values eg. "10" + "20" + "14" = 44 for start of process to solve the correct linear equation, eg. $5n = 54 + 6$ ($n = 12$) **or** for 12, 24, 18 for "12" : 2 × "12" – 6 oe eg 12 : 18 oe or 18 : 12 linked to T, R for 1.5 or $\frac{3}{2}$ or $1\frac{1}{2}$	 Accept 1 : 1.5 etc as answer