

1		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
2		135	M1 A1	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 Cao
3		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
4 (a)		$\frac{3}{7}$	B1	for $\frac{3}{7}$ or equivalent fraction
(b)		3 : 1	B1	for 3 : 1 or equivalent ratio
5		5 : 2 : 10	P1 P1 A1	for process to calculate total for quiz or total of membership fees eg. $13 \times 5 + 35$ ($=100$), 25×20 ($=500$) for complete process to write (correct) figures as a ratio, eg 250 : 100 : 500 oe in any order (condone inclusion of units or words) cao
6		(£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. $\pounds 6 \div 2 \times 9$ ($= \pounds 27$) or a correct entry in the table. demonstrates a proportional method to find at least one cost for silk, eg. $\pounds 6 \div 2 \times 5$ ($= \pounds 15$) or a correct entry in the table. for a fully correct table (accept 67.5(0))
7	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 : 3n gets M1A0
8	140	P1 P1 A1	for beginning to solve the problem eg $50 \div 5 \times 8$ ($= 80$) or 14 : 8 : 5 oe or 14 : 8 and 8 : 5 oe (linked) for a full process to solve the problem eg "80" $= 4 \times 7$ or $\frac{50}{5} \times "14"$ 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

9	(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
			A1	cao	
	(b)	1 : 3	P1	for a process to find Chan's share, eg "20" – 2.5 – [Bisphah'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)
			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	
10		4 : 1 : 2	M1	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	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
			A1	4 : 1 : 2 oe	
			(SCB1)	3 integer numbers in correct ratio but no ratio notation, eg 4, 1, 2 or 20, 5, 10)	
11		3 : 5	B1	for 3 : 5 or for any other equivalent ratio	
12		blue 0.15 green 0.2	P1	for $1 - 0.4 - 0.25 (=0.35)$ oe	May work in percentages, condone missing % sign If the two numbers in the table sum to 0.35 that implies P1 One correct value in the table implies P2 7 can come from 3+4 Accept answers given in decimals, fractions or percentages.
			P1	for using the ratio, eg "0.35" $\div (3 + 4) (=0.05)$ or "0.35" $\times \frac{3}{7} (=0.15)$ or "0.35" $\times \frac{4}{7} (=0.2)$	
			P1	for a complete process $3 \times "0.05" (=0.15)$ and $4 \times "0.05" (=0.2)$ or "0.35" – "0.15" (=0.2) or "0.35" – "0.2" (=0.15) or green 0.15, blue 0.2	
			A1	oe	
13	(a)	$\frac{3}{7}$	B1	oe	Accept a fraction equivalent to $2\frac{1}{2}$, eg $1 : \frac{30}{12}$ 2.5 alone gets M1A0
	(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 $n = 2.5$	

14	7	P1	for $750 \times 9 (=6750)$ or $1 + 9 (=10)$ or $750 + 1000 (= 0.75)$	This can be implied by (1 litre of drink =) 100 (ml) of squash and 900 (ml) of water
		P1	(dep) for “6750” + 750 (=7500) or for “10” \times 750 (=7500) or “0.75” \times “1 + 9” (= 7.5)	
		A1	cao	
			Alternative	
		P1	for $100 + 900 (= 1000)$	
		P1	(dep) for $750 \div 100 (= 7.5)$	
A1	cao			

15	$\frac{3}{10}$	P1	for a process to find three amounts in the correct proportions, eg $R = 1, L = 3 \times 1 = 3, A = 2 \times 3 = 6,$ or $R : L : A = \frac{1}{6} : 0.5 : 1$ oe or $L=3R, L=\frac{A}{2}$ or $L=3R, 2L=A$	Relationship could be given in algebraic form or in ratio form, using fractional comparison or using their own figures Award P1 for correct answer not given as a fraction
		A1	for $\frac{3}{10}$ or equivalent fraction	

16	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	

17	No (supported)	P1	for $3000 \div (2 + 3) (= 600)$	Full method to compare No may be implied by a statement No working, answer only no marks
		P1	for “600” \times 2 (= 1200) or “600” \times 3 (= 1800) or “600” \div 6 (= 100) or “600” \div 20 (= 30)	
		P1	for “1200” \div 6 (= 200) or “1800” \div 20 (= 90) or “100” \times 2 (= 200) or “30” \times 3 (= 90)	
		P1	for “90” \div (“200” + “90”) \times 100 (= 31.0...) oe or “90” \div (“200” + “90”) (= 0.31...) oe or $0.3 \times$ (“200” + “90”) (= 87)oe	
		C1	correct conclusion and fully correct calculations with accurate figure eg No and 87 or No and 31% or No and 0.31	