Question	Answer Marks		Part Marks and Guidance	
1	0.458	2	M1 for attempt to subtract soi by 0.4()	

2		0.16 oe	3	M2 for (1 – 0.15 – 0.37) ÷ 3 oe soi	M2 implied by an answer figs 16
				Or M1 for 1 – 0.15 – 0.37 soi by 0.48	

3	(a)	BADC with correct working	3		Allow names or fractions for 3 marks
				M1 for attempt to change any 2 fractions to a common denom, decimal or % A1 for any 2 correctly changed $(A =)\frac{12}{48}$ $(B =)\frac{16}{48}$ $(C =)\frac{9}{48}$ = 0.25 $= 0.33()$ $= 0.18()(D =)\frac{10}{48}= 0.20()OrIf converting to unit fractionsB1 for C = \frac{1}{5.3()} or D = \frac{1}{4.8}$	Condone 1 incorrect conversion with up to 2 correct for up to 3 marks Allow 0.33, 0.34, 0.18, 0.19, 0.200.21 and equivalent % Condone unconventional fractions eg $\frac{4.5}{24}$
				Or If a pictorial approach used: B1 for 4 reasonable pictures Or, if 0, SC1 for BADC	ie from wrong or no working
	(b)	They don't add up to 1	1ft	Total = $\frac{47}{48}$, 0.98, 98% ft sum of their 4 terms	Allow 'It only adds up to 47' oe ft Allow 'whole' for '1' if not contradicted. Allow 'not all money distributed' etc Allow 'too much money distributed' if their sum > 1 whether or not evaluated
		Any 1 fraction increased by $\frac{1}{48}$	1	cao Or 0.02, 2%	Condone unconventional fractions eg $\frac{0.5}{24}$

4	(a)	(i)	62.5 or 621/2	2	M1 for $6\frac{1}{4} \times 10$ oe After 0 allow SC1 for answer 31.25 or $31\frac{1}{4}$ or answer 87.5 or $87\frac{1}{2}$	5 days one way or 7 days both ways
		(ii)	18 mins 45 secs	4	B3 for 18.75 seen or for ans. 187 m 30 s Or M2 for (<i>their</i> $6\frac{1}{4}$) ÷ 20 × 60 [× 60] oe Or M1 for (<i>their</i> $6\frac{1}{4}$) ÷ 20 After 0 allow SC1 for 18 m p s (p ≠ 0) or 19 m 15 s	<i>Their</i> 6¼ may be 62.5 or <i>their</i> (a)(i) or <i>their</i> (a)(i) ÷ 10
	(b)		39	3	B2 for answer of 26 Or M2 for $65 - \frac{2}{5} \times 65$ oe Or M1 for $\frac{2}{5} \times 65$ oe	ie $\frac{3}{5} \times 65$
	(C)	(i)	0.12 oe	2	M1 for 1 – (0.4 + 0.33 + 0.15) soi by answer of 0.48 Ignore incorrect conversion after correct answer	In parts (c)(i) & (ii) ⁻¹ once for poor notation eg $\frac{0.12}{1}$; 1 : 0.12 etc
		(ii)	0.55 oe final answer	2	M1 for 0.4 + 0.15 soi by answer of 0.19	
		(iii)	375	2	M1 for 2500 × 0.15 oe	

5	(a)	($\frac{7}{24}$ final answer	2	M1 for common denominator ie $\frac{x}{24n}$	0 for decimals in (i) and (ii)
		(ii)	$3\frac{1}{3}$	3	B2 for $\frac{10}{3}$ or $3\frac{2}{6}$ oe	isw after a correct or partially correct answer
					Or M1 for $\frac{5}{6} \times \frac{4}{1}$ soi by $\frac{20}{6}$	Condone 3.3 for 3 marks 3.3 etc scores 0
					If 0 scored then SC1 for any correct conversion from top heavy to mixed or for correct cancelling of any fraction	eg $\frac{20}{24} = \frac{5}{6}$
	(b)		4, 4 0e	1		0 for $\frac{1}{0.25}$

6	(a)	$\frac{7}{20}$ oe	2	M1 for 1 correct conversion to 20ths, 40ths, etc or one correct decimal conversion	Condone 0.35, 35% for 2
	(b)	$\frac{3}{20}$ oe	2	M1 for $\times \frac{1}{5}$ or 0.75 ÷ 5	Condone 0.15, 15% for 2 0.75÷5 must have a reasonable attempt at evaluation.

7	(a)	$\frac{7}{40}$ isw	2	M1 for use of common denominator with one correct conversion	
	(b)	2 <mark>4</mark> 5	4	M1 for one correct conversion to top heavy M1 for multiplying either numerators or denominators A1 for $\frac{14}{5}$ oe B1FT for correct conversion to simplified mixed number as their answer	Indep. Could be implied eg $\frac{3}{5} \times \frac{3}{4} = \frac{6}{20}$ gets M1

8	(a)	<u>1</u> 15	2	M1 for $\frac{2}{30}$ oe	Answer may be in body so allow 2 if $a = \frac{1}{15}$ clearly stated
	(b)	$1\frac{11}{13}$ r $\frac{24}{13}$	4	B3 for $\frac{12}{5} \times \frac{10}{13}$ or $\frac{13}{10} \times b = \frac{12}{5}$ oe or $\frac{120}{65}$ oe Or B2 for $\frac{12}{5}$ or $2\frac{2}{5}$ Or M1 for $\frac{2}{5} \div \frac{1}{6}$ or $\frac{1}{6} \times ? = \frac{2}{5}$ And M1dep for <i>their</i> $\frac{12}{5} \times \frac{10}{13}$	

9	(a)	72	1		
	(b)	(i) $\frac{2}{5}$ (ii)	2 2	M1 for $\frac{32}{80}$ oe M1 for 80 ÷ 5 or 240 ÷ 5 or 16 seen or $\frac{48}{80}$ as final answer	allow $\frac{1}{5}$ of 80 for M1
	(c)	$\frac{3}{5}, \frac{13}{20}, \frac{2}{3}, \frac{11}{15}$ with four correct converted fractions with same denominator seen	4	B3 if 3 fractions correct to the same common denominator or B2 for any 2 fractions correct to the same common denominator or M1 for attempt at converting any 2 fractions to same common denominator If no other marks scored allow SC1 for correct answer $\frac{3}{5} = \frac{36}{60}, \frac{11}{15} = \frac{44}{60}, \frac{2}{3} = \frac{40}{60}, \frac{13}{20} = \frac{39}{60}$	allow if converted to decimals correct to at least 2dp; $\frac{3}{5} = 0.6 \frac{13}{20} = 0.65 \frac{2}{3} = 0.66 \text{ or } 0.67$ $\frac{11}{15} = 0.73$ (accept percentages) allow dot notation correctly used BOD if numerator is not an integer