Paper: 1MA	Paper: 1MA1/3F							
Question	Working	Answer	Mark	Notes				
10 Q1		60	M1	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)				
			A1	cao				

Paper: 1MA	Paper: 1MA1/1F								
Question	Working	Answer	Mark	Notes					
8 (a) Q2 (b)	J	$\frac{15}{32}$ $\frac{5}{12}$	B1 M1 A1	uses a correct common denominator with at least one correct matching numerator e.g. $\frac{8}{12}$, $\frac{3}{12}$					

Paper: 1MA	Paper: 1MA1/1F					
Question	Working	Answer	Mark	Notes		
9		126	P1	for working with time,eg $10 - 8(=2)$ or $12 \times 8(=96)$ or $12 \times 10(=120)$		
Q3			P1	for working with overtime, eg 12 ÷ 4(=3) or 1.25 × "2" (=2.5) or 0.25 × "2" (=0.5) or 1.25 × $12(=15)$		
			P1	for a complete process, eg $(10-8) \times$ overtime rate $+12 \times 8$ or $12 \times 10 + \text{``}0.5\text{''} \times 12$		
			A1	cao		

Paper 1MA1	Paper 1MA1: 2F						
Question	Working	Answer	Mark	Notes			
4 Q4		$\frac{11}{30}$, $\frac{2}{5}$, $\frac{7}{15}$, $\frac{1}{2}$	M1 A1	converts fractions to a common form, e.g. fractions with a denominator of 30, decimals or percentages, at least two conversions correct or any 3 fractions in correct order correct order			

Paper: 1MA1/3	Paper: 1MA1/3F							
Question	Working	Answer	Mark	Notes				
4 Q5		40	M1 A1	for $32 \div 4$ (= 8) or 32×5 (= 160) or complete method eg $32 \div 4 \times 5$ oe (= 40) cao				

Paper: 1MA1	Paper: 1MA1/2F							
Question	Answer	Mark	Mark scheme	Additional guidance				
⁶ Q6	5, 11, 3, 19 7, 15, 4, 25	M1	conversion into decimals or percentages or other equivalent form, at least two conversions correct, or any three fractions in correct order	0.71(), 0.73(), 0.75, 0.76				
		A1	cao	Accept list in reverse order for this mark Accept expressed in equivalent decimals or percentages or any other appropriate form				

Paper: 1MA1/3F								
Question	Answer	Mark	Mark scheme	Additional guidance				
⁴ Q 7	90	B1	cao					

Paper: 1MA1/1F							
Question	Answer	Mark	Mark scheme	Additional guidance			
4 Q8	3 9	B1	for $\frac{3}{9}$ accept $\frac{1}{3}$				

Paper: 1MA1	Paper: 1MA1/3F								
Question	Answer	Mark	Mark scheme	Additional guidance					
11	$\frac{40}{560}$ oe	M1	for correct start to method $eg 600 - 560 (= 40)$ or 600 oe $(= 1.07(14))$						
Q9	300	A1	eg $600 - 560$ (= 40) or $\frac{600}{560}$ oe (= 1.07(14)) OR correct answer but not a fraction eg $0.07(14)$ for any equivalent fraction to $\frac{40}{560}$ eg $\frac{1}{14}$						

Paper: 1MA1	Paper: 1MA1/1F								
Question	Answer	Mark	Mark scheme	Additional guidance					
⁴ Q10	$\frac{2}{5}$	B1	cao						

Paper: 1MA1	Paper: 1MA1/2F								
Question	Answer	Mark	Mark scheme	Additional guidance					
7	13	M1	for 20 7 (-12) or 7 og or 0.65 or 65%	~					
	20	IVII	for $20 - 7 = 13$) or $\frac{7}{20}$ oe or 0.65 or 65%						
Q11									
Q11		A1	for 13 or agriculant fraction						
		AI	for 13 or equivalent fraction 20						

Paper: 1MA1	/2F			
Question	Answer	Mark	Mark scheme	Additional guidance
Question 12 Q12	0.35	Mark P1	for $\left(\frac{1}{10} + \frac{3}{5}\right) \div 2$ or 0.1 and 0.6 or 10(%) and 60(%) or 35(%) or for converting to equivalent fractions with a common denominator eg $\frac{1}{10}$ and $\frac{6}{10}$	Additional guidance
		A1	for $\frac{7}{20}$ oe or 0.35	

Paper: 1MA1/3F						
Question	Answer	Mark	Mark scheme	Additional guidance		
² Q13	10	B1	cao			

Paper: 1MA1/1F						
Question	Answer	Mark	Mark scheme	Additional guidance		
Q14	$\frac{1}{4}, \frac{1}{3}, \frac{1}{2}, \frac{7}{12}, \frac{3}{4}$	M1	converts fractions to a common equivalent form, at least two conversions correct eg fractions with a denominator of 12, decimals or percentages, or any 4 fractions in correct order	0.25, 0.33(), 0.5, 0.58(), 0.75		
Q14	A1	A1	cao	Accept list in reverse order for this mark Accept expressed in equivalent decimals or percentages or any other appropriate from or mixed forms		

Paper:	Paper: 1MA1/1F						
Questio	n	Answer	Mark	Mark scheme	Additional guidance		
14	(a)	14	B1	for 14			
	(b)	Explanation	C1	for explanation Acceptable examples			
Q	15			she divided by 2 but should have multiplied by 2 there are 96 halves in 48 $48 \times 2 = 96$ Not acceptable examples $24 \times 2 = 48$			

Paper: 1MA1	Paper: 1MA1/3F						
Question	Answer	Mark	Mark scheme	Additional guidance			
Q16	39	M1 M1	for finding one quarter of 52, eg 52 ÷ 4 (= 13) OR for finding the fraction to be filled, eg $1 - \frac{1}{4} = \frac{3}{4}$ oe for a complete method eg 52 – "13" or "13" × 3 OR for " $\frac{3}{4}$ " × 52	Accept equivalent decimals or percentages			
		A1	cao				

Paper: 1MA1	Paper: 1MA1/3F							
Question	Answer	Mark	Mark scheme	Additional guidance				
10	$\frac{3}{5}$	M1	for a start in the method eg $35 + 50 + 75 = 160$ or $400 - 35 - 50 - 75 = 240$ or $\frac{160}{400}$ oe					
Q17		M1	for eg $\frac{400 - 160}{400}$ or $\frac{2}{5}$ or $1 - \frac{160}{400}$					
			or for an unsimplified answer eg $\frac{"240"}{400}$ oe or as 60% oe					
		A1	cao					

Paper: 1MA1/3F						
Question	Answer	Mark	Mark scheme	Additional guidance		
² Q18	8	B1	cao			

Paper: 1MA1	Paper: 1MA1/3F						
Question	Answer	Mark	Mark scheme	Additional guidance			
7 Q19	$\frac{3}{4}$	M1	for method to find fraction shaded, eg 12 out of 16 squares shaded or unsimplified answer eg $\frac{12}{16}$ or for $1-\frac{1}{4}$ oe or for an answer of $\frac{1}{4}$ cao	May be expressed in a wide variety of ways.			

Paper: 1MA1	Paper: 1MA1/2F						
Question	Answer	Mark	Mark scheme	Additional guidance			
10 Q20	$\frac{17}{30}$	B1	for $\frac{17}{30}$ or any equivalent fraction				

Paper: 1MA1	Paper: 1MA1/2F					
Question	Answer	Mark	Mark scheme	Additional guidance		
15	$\begin{array}{c} 4 & 3 & 5 & 2 \\ 9 & 5 & 8 & 3 \end{array}$	M1	converts into decimals or percentages or equivalent fractions, at least 2 conversions correct or for any 3 fractions in correct order	0.44(), 0.6, 0.625, 0.66()		
Q21		A1	for $\frac{4}{9}, \frac{3}{5}, \frac{5}{8}, \frac{2}{3}$	Accept in reverse order for this mark Accept expressed in equivalent decimals or percentages or fractions or in mixed numerical form		

Paper: 1MA1/3F						
Question	Answer	Mark	Mark scheme	Additional guidance		
⁴ Q22	11	B1	cao			

Paper: 1MA1	Paper: 1MA1/3F						
Question	Answer	Mark	Mark scheme	Additional guidance			
14	80	P1	for $1 - \frac{13}{15} \left(= \frac{2}{15} \right)$ or $\frac{13}{15} \times 600$ (million) (= 520 (million))	Condone no million or may see 000 000 used* *In this case condone up to two missing 0s for the award of the P marks.			
Q23		P1	for " $\frac{2}{15}$ "×600 (million) (= 80 (million)) or 600 – "520" (=80) oe	For P marks accept $\frac{13}{15}$, $\frac{2}{15}$ rounded or truncated to no less than 2dp.			
		A1	Accept 80 000 000				

Paper: 1MA1/	Paper: 1MA1/2F							
Question	Answer	Mark	Mark scheme	Additional guidance				
12 (a)	82.5	M1	for a complete method, eg $132 \div 8 \times 5$	132 – 82.5 (= 49.5) M1 implied				
		A1	cao					
(b)	$\frac{1}{4}$, $\frac{9}{32}$, $\frac{21}{64}$, $\frac{3}{8}$	M1	converts into decimals or percentages or equivalent fractions, at least 2 conversions correct	0.25, 0.28(125), 0.32(8125), 0.37(5)				
Q24			or for any 3 fractions in correct order					
		A1	cao	Accept in reverse order for this mark Accept expressed in equivalent decimals or percentages or fractions or in mixed numerical form				

Paper: 1MA1	Paper: 1MA1/2F							
Question	Answer	Mark	Mark scheme	Additional guidance				
² Q25	$\frac{7}{10}$	B1	oe fraction					

Paper: 1MA	Paper: 1MA1/3F					
Question	Answer	Mark	Mark scheme	Additional guidance		
² Q26	7	B1	cao			

Paper: 1MA	Paper: 1MA1/3F						
Question	Answer	Mark	Mark scheme	Additional guidance			
12	3	M1	for $\frac{60}{1000}$ or equivalent fraction				
Q27	50		1000 of equivalent fraction				
227		A1	cao				

Paper 1MA	1: 1F			
Question	Working	Answer	Mark	Notes
14		5 7	P1	for $\frac{7}{5} = 1.4$ or $\frac{5}{7} = 0.7$ or compares $\frac{1}{7}$ to $\frac{1}{5}$ or compare $\frac{5}{7}$ to 1 eg $1 - \frac{5}{7} (=\frac{2}{7})$ or compare $\frac{7}{5}$ to 1 eg $\frac{7}{5} = 1\frac{2}{5}$ or eg $\frac{49}{35}$ or $\frac{14}{35}$ or $\frac{25}{35}$ oe
Q28		supported	P1	for $\frac{7}{5} = 1.4$ and $\frac{5}{7} = 0.7$ or compares $\frac{5}{7}$ to 1 eg $1 - \frac{5}{7} = \frac{2}{7}$ and $\frac{7}{5}$ to 1 eg $\frac{7}{5} = \frac{12}{5}$ two correct fractions with common denominator eg $\frac{49}{35}$ and $\frac{25}{35}$
			C1	for $\frac{5}{7}$ with supporting evidence

Paper 1MA	Paper 1MA1: 1F							
Question	Working	Answer	Mark	Notes				
22 (a)	$\frac{8}{20} + \frac{5}{20}$	13 20	M1	for suitable common denominator with one fraction out of two correct \mathbf{or} $0.4 + 0.25$				
Q29			A1	for $\frac{13}{20}$ or 0.65 oe				
(b)		<u>1</u> 8	B1	Accept 0.125				

Paper: 1MA1/	Paper: 1MA1/1F						
Question	Answer	Mark	Mark scheme	Additional guidance			
11 (a)	$\frac{10}{16}$	B1	cao				
(b) Q30	$\frac{11}{12}$	M1	$ \begin{array}{c} \text{for } \frac{10}{12} \\ \mathbf{OR} \end{array} $				
QSO			for using a suitable common denominator other than 12 with at least one of the two fractions correct, eg $\frac{2}{24} + \frac{20}{24}$				
		A1	for $\frac{11}{12}$ oe	Accept any equivalent fraction			

Paper: 1MA1	Paper: 1MA1/1F						
Question	Answer	Mark	Mark scheme	Additional guidance			
19 (a)	$\frac{95}{28}$	M1	for a method to add using common denominators with at least one fraction correct (matching numerator with common denominator) $ eg \frac{60}{28} + \frac{35}{28} or (2) \frac{4}{28} + (1) \frac{7}{28} $	Use of decimals gets no credit unless it leads to a correct fraction			
Q31		A1	$\frac{95}{28}$ oe eg $3\frac{11}{28}$				
(b)	$1\frac{3}{5}$	M1	for $\frac{6}{5} \times \frac{4}{3}$ or $\frac{24}{20} \div \frac{15}{20}$ or $\frac{8}{5}$ oe eg $1\frac{9}{15}$	Use of decimals gets no credit unless it leads to a correct fraction			
		A1	cao				

Paper: 1MA1	Paper: 1MA1/1F								
Question	Answer	Mark	Mark scheme	Additional guidance					
22	$2\frac{1}{3}$	M1	for either $\frac{7}{4}$ oe or $\frac{4}{3}$ oe						
Q32		M1	for method to find the product, $\operatorname{eg} \frac{7 \times 4}{4 \times 3}$ or $\frac{21 \times 16}{12 \times 12}$ oe or for $\frac{28}{12}$ or $\frac{7}{3}$ oe						
		A1	for $2\frac{1}{3}$ or an equivalent mixed number						

Paper: 1MA1	Paper: 1MA1/1F							
Question	Answer	Mark	Mark scheme	Additional guidance				
19 (a)	$\frac{7}{15}$	M1	for suitable common denominator with at least one fraction out of two correct, eg $\frac{10}{15} - \frac{3}{15}$ oe					
		A1	oe					
Q33	$\frac{1}{2}$	M1	for method to multiply fractions, eg $\frac{2 \times 3}{3 \times 4}$, $\frac{8 \times 9}{12 \times 12}$ or to simplify, $\frac{1}{3} \times \frac{3}{2}$ or $\frac{2}{1} \times \frac{1}{4}$					
		A1	OR for an answer equivalent to $\frac{1}{2}$ (unsimplified) eg $\frac{2}{4}$, 0.5 cao					

Paper: 1MA1	Paper: 1MA1/1F						
Question	Answer	Mark	Mark scheme	Additional guidance			
21	Shown	M1	for conversion to improper fractions eg. $\frac{7}{3}$ or $\frac{15}{4}$	Need not be shown with operators			
		M1	(dep) for method to multiply fractions,				
Q34			eg. $\frac{7\times15}{3\times4} \left(=\frac{105}{12}\right)$ or $\frac{28\times45}{12\times12} \left(=\frac{1260}{144}\right)$ oe				
		C1	for complete working showing each stage as far as $\frac{35}{4}$ or $8\frac{9}{12}$				

Paper: 1MA1	Paper: 1MA1/2F						
Question	Answer	Mark	Mark scheme	Additional guidance			
19 Q35	$\frac{3}{10}$	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 for $\frac{3}{10}$ or equivalent fraction	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			

Paper: 1MA1	/1 F			
Question	Answer	Mark	Mark scheme	Additional guidance
Q36	$1\frac{8}{15}$	M2	for a complete method, eg $4-2+\frac{3}{15}-\frac{10}{15}$ condoning error with one numerator or for $\frac{21}{5}-\frac{8}{3}=\frac{63}{15}-\frac{40}{15}(=\frac{23}{15})$ with no more than one error for finding two fractions with a correct common denominator, with at least one correct corresponding numerator, eg $\frac{3}{15}$, $\frac{10}{15}$ or for converting both to improper fractions, eg $\frac{21}{5}$, $\frac{8}{3}$)	At least one improper fraction must be correct Any equivalents must be a mixed number

Paper: 1MA1/1F								
Question	Answer	Mark	Mark scheme	Additional guidance				
(b) Q37	$3\frac{17}{20}$	M1	for finding two fractions with a correct common denominator (multiple of 20), with at least one correct corresponding numerator, eg. $\frac{12}{20}$, $\frac{5}{20}$ or $\frac{32}{20}$, $\frac{45}{20}$	May be from $\frac{3}{5}$ and $\frac{1}{4}$ or from $\frac{8}{5}$ and $\frac{9}{4}$				
		A1	for $3\frac{17}{20}$ or an equivalent mixed number SC: B1 for 3.85 if M0 scored					
	shown	M1	for $\frac{8}{3} \times \frac{1}{6}$ oe or $\frac{4}{9} \times \frac{6}{1}$ oe or $\frac{8}{3} \times \frac{9}{4}$ oe					
		o	for unsimplified fraction which could lead to $\frac{4}{9}$, eg $\frac{8}{18}$ or for $\frac{4}{3} \times \frac{1}{3}$ or $\frac{24}{9} \div 6$					
			for unsimplified fraction which could lead to $2\frac{2}{3}$, eg $\frac{24}{9}$ or for unsimplified fraction which could lead to 6 , eg $\frac{72}{12}$					
			for unsimplified fraction which could lead to 6 , eg $\frac{1}{12}$					

Paper: 1MA1/1F						
Question	Answer	Mark	Mark scheme	Additional guidance		
12 (a)	7 12	M1 A1	for finding two fractions with a correct common denominator, with at least one correct corresponding numerator, eg. $\frac{5}{12}$, $\frac{2}{12}$ for $\frac{7}{12}$ oe eg $\frac{14}{24}$, $\frac{21}{36}$, $\frac{28}{48}$, $\frac{35}{60}$, $\frac{42}{72}$,	Ignore errors in cancelling following sight of an equivalent fraction to $\frac{7}{12}$		
(b) Q38	$\frac{3}{16}$		for method to multiply fractions, eg $\frac{3\times5}{10\times8} (=\frac{15}{80})$ or simplifies the calculation eg $\frac{3}{2} \times \frac{1}{8}$ or for an answer equivalent to $\frac{3}{16}$ unsimplified cao			

Paper: 1MA1/1F							
Question	Answer	Mark	Mark scheme	Additional guidance			
20	39 88	M1	for finding the gap (A) $1 - \frac{5}{8} = \frac{3}{8} = \frac{33}{88}$ or (C) $1 - \frac{9}{11} = \frac{2}{11} = \frac{16}{88}$ or $\frac{5}{8} + \frac{9}{11} = \frac{55}{88} + \frac{72}{88} = \frac{127}{88}$				
Q39		M1	for $\frac{9}{11} - \frac{3}{8} \left(= \frac{72}{88} - \frac{33}{88} \right)$ or $\frac{5}{8} - \frac{2}{11} \left(= \frac{55}{88} - \frac{16}{88} \right)$ or $1 - \frac{3}{8} - \frac{2}{11} \left(= 1 - \frac{33}{88} - \frac{16}{88} \right)$ oe or $\frac{5}{8} + \frac{9}{11} - 1 \left(= \frac{55}{88} + \frac{72}{88} - 1 \right)$				
		A1	oe				