

Writing and Simplifying Ratio

November 2024 Paper 2

Question	Answer	Mark	Mark scheme	Additional guidance
9	3 : 5	M1 A1	for 90 : 150 oe ratio or 5 : 3 cao	eg 30 : 50, 15: 25, 9 : 15 Accept 3 : 5 in the form $n : 1$, eg 0.6 : 1 or 1 : n , eg 1 : 1.66(...)

June 2020 Paper 1

Question	Answer	Mark	Mark scheme	Additional guidance
9 (a)	$\frac{3}{7}$	B1	oe	
9 (b)	1 : 2.5	M1 A1	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 $2\frac{1}{2} : 1$ 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

June 2024 Paper 1

Question	Answer	Mark	Mark scheme	Additional guidance
10	2 : 3	M1 A1	for 24 : 36 oe or 3 : 2 or 1.5 : 1 2 : 3 or 1 : 1.5	Do not ISW from 2:3

November 2023 Paper 2

Question	Answer	Mark	Mark scheme	Additional guidance
10	3 : 5	M1 A1	for 24 : 40 or for any ratio equivalent to 24 : 40 or 5 : 3 for 3 : 5	Accept 3 : 5 in the form $n : 1$, eg 0.6 : 1 or 1 : n , eg 1 : 1.66(..)

November 2022 Paper 3

Question	Answer	Mark	Mark scheme	Additional guidance
12	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.

November 2021 Paper 1

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

November 2021 Paper 3

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

June 2020 Paper 2

Question	Answer	Mark	Mark scheme	Additional guidance
17 (a)	5	P1	for finding the number of oranges required eg $8 \div 2 \times 30 (=120)$ oe or for finding the number of oranges left from use of at least 2 boxes eg $24 \times 2 - 30 (=18)$ or $24 \times 4 - 90 (=6)$ or finds the correct amount of juice possible from at least two boxes eg $24 + 24$ is 2 litres or $24 + 24 + 24$ is 4 litres	A build up method with no process shown must use fully correct figures
		P1	for a complete process eg " 120 " $\div 24 (=5)$ oe or $30 + 30 + 30 + 30 (=120)$ and $24 + 24 + 24 + 24 (=120)$ or $24 \times 2 - 30 = 18$, $18 + 24 = 42$, $42 - 30 = 12$, $12 + 24 = 36$, $36 - 30 = 6$, $6 + 24 = 30$	May be seen as a mixture of repeated subtraction and addition
		A1	cao with no arithmetic errors seen	This mark cannot be awarded if the supporting work has an arithmetic error
			SCB1 for an answer of 10 supported by working	An answer only and no working is no marks
(b)	9 : 2	M1	for a partially simplified correct ratio eg $126 : 28$ or any other equivalent ratio or $2 : 9$	eg $630:140$, $315:70$, $63: 14$ $180:40$, $90:20$, $45:10$, $4.5:1$
		A1	cao	

June 2024 Paper 3

Question	Answer	Mark	Mark scheme	Additional guidance
20	1 : 3	M1	for method to find angle ABC , eg $180 - 2 \times 81 (= 18)$ oe	Award first 3 marks for angles 18, 72, 54 marked on diagram provided not ambiguous
		M1	for method to find angle BCD , eg “18” $\times 4 (= 72)$	
		M1	for method to find angle CBD , eg $\frac{180 - "72"}{2} (= 54)$	
		M1	(dep M3) for writing as ratio, eg “18” : “54” or for an answer of 1 : 3n or 3 : 1	
		A1	(dep M3) for 1 : 3 from correct working	
				Accept $n = 3$ 1 : 3 or $n = 3$ without working scores 0 marks