

Fractions (Mixed) Mark Scheme		
1(a)	$\frac{24}{11} \times \frac{13}{12} = \frac{312}{132}$	[1] Convert to improper fractions and multiply
	$= \frac{26}{11} = 2\frac{4}{11}$	[1] Cancelling down and converting to a mixed fraction
1(b)	$\frac{15}{2} \div \frac{2}{3} = \frac{15}{2} \times \frac{3}{2}$	[1] Convert to improper fractions and changing the division to a multiplication by inverting the second fraction.
	$= \frac{45}{4} = 11\frac{1}{4}$	[1] Converting back to a mixed fraction
2(a)	$\frac{2}{12} + \frac{3}{12} + \frac{4}{12} = \frac{9}{12}$	[1] Convert given fractions to have the same denominator and adding together
	$1 - \frac{9}{12} = \frac{3}{12} = \frac{1}{4}$	[1] Subtracting result from 1 and simplifying
2(b)	$48 \times \frac{1}{4}$	[1] Multiplying fraction by total number
	$= 12$	[1] Finding correct answer
3(a)	Use a denominator of 120	[1] Identify common denominator
	Equivalent fractions: $\frac{96}{120} \frac{90}{120} \frac{105}{120} \frac{100}{120}$	[1] Compare fractions now with same denominator
	The closest to 1 is $\frac{105}{120}$ so George ate the most pizza.	[1] Correct interpretation
3(b)	$\frac{24}{120} + \frac{30}{120} + \frac{15}{120} + \frac{20}{120} =$	[1] Determine the amount each has left and adding them together
	$\frac{89}{120}$	[1] Total fraction of pizza left
4(a)	$9 \times \frac{4}{5} =$	[1] Find fractional area
	$\frac{36}{5} \text{ km}^2$	[1] Keep as simplified fraction
4(b)	$\frac{3}{8} \times \frac{17}{12} = \frac{1}{8} \times \frac{17}{4} =$	[1] Convert to improper fraction and simplify
	$\frac{17}{32} \text{ km}^2$	[1] Correct fractional area in simplest form
5(a)	$= \frac{8}{7} \times \frac{10}{3}$	[1] Convert to improper fractions and multiply
	$= \frac{80}{21} = 3\frac{17}{21}$	[1] Converting answer to mixed fraction

Turn over ►

5(b)	$= \frac{8}{7} + \frac{10}{3}$	[1] Convert to improper fractions and add
	$= \frac{94}{21} = 4 \frac{10}{21}$	[1] Converting answer to mixed fraction
6(a)	$\frac{3}{15} + \frac{5}{15} = \frac{8}{15}$	[1] Identify common denominator and add
	$1 - \frac{8}{15} = \frac{7}{15}$	[1] Total fraction of rope left
6(b)	$\frac{7}{15} \times 900 = 420 \text{ cm}$	[1] Find total length of rope left
	$\frac{420}{4} = 105 \text{ cm}$	[1] Correct length of each section of rope

END