Order of Operations

November 2022 Paper 1

Question	Answer	Mark	Mark scheme	Additional guidance
3	4	B1	cao	

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9	Explanation	C1	for explanation, **Acceptable examples** Answer should be 14 Should work out 3 × 4 first Alec should times first instead of adding Not used BIDMAS/BODMAS BIDMAS/BODMAS He has done it in the wrong order Alec needs to use brackets so 2 + (3 × 4) Because you always do multiplication or division first **Not acceptable examples** Because the answer is wrong It is 2 + (3×4) = 15 It needs brackets Because working out should only be one sum	

Question	Answer	Mark	Mark scheme	Additional guidance
11 (a)	3	B1	cao	
(b)	32	B1	cao	
(c)	30 ÷ (3 + 2) – 4	B1	for brackets correctly placed	

Question	Answer	Mark	Mark scheme	Additional guidance
12	explanation	C1	for explanation **Acceptable examples** he should have multiplied first multiplication should be done before subtraction he should have done 3×4 first he didn't use BIDMAS/BODMAS/PEMDAS $5 - 12 = -7$ **Not acceptable examples** he was correct the answer is – 7 Olly's method gives the wrong answer BIDMAS/BODMAS/PEMDAS he should multiply first so $3 \times 4 = 12$ then $12 - 5 = 7$ he should have done $3 \times 4 = 12$ then $12 - 5 = 7$ he should have done 2×4 first	