

Algebra & Sequences: Medium Practice Paper 3 Answers

Q#	Answer	Explanation
1	C	Replace n with 4: $6 \times 4 + 3 = 24 + 3 = 27$.
2	C	Take 11 from both sides: $2x = 14$. Then divide by 2: $x = 7$.
3	C	The sequence goes up in 5s. From the 1st to the 20th term there are 19 steps, so $9 + 19 \times 5 = 104$.
4	C	$4a = 4 \times 7 = 28$ and $5b = 5 \times 2 = 10$, so $28 - 10 = 18$.
5	B	The terms are 5, then $(5 - 3) \times 2 = 4$, then $(4 - 3) \times 2 = 2$, then $(2 - 3) \times 2 = -2$.
6	B	All the terms use the same letter, so work with the numbers: $7 - 2 + 5 = 10$, giving $10c$.
7	C	The sequence goes up in 7s, so the missing term is $-5 + 7 = 2$.
8	B	Take 5 from both sides: $6n = 36$. Then divide by 6: $n = 6$.
9	A	Three apples cost $3a$ and two pears cost $2p$, so the total is $3a + 2p$.
10	B	Replace n with 10: $50 - 4 \times 10 = 50 - 40 = 10$.
11	C	The sequence goes up in 5s, so start with $5n$, which gives 5, 10, 15, 20. Each term is 3 less, so the rule is $5n - 3$.
12	B	$5x = 5 \times 3 = 15$ and $x^2 = 3 \times 3 = 9$, so $15 - 9 = 6$.
13	D	Add the last two terms: $5 + 8 = 13$.
14	B	Divide both sides by 3: $x + 4 = 9$. Then take 4 from both sides: $x = 5$.
15	C	Work backwards: $31 - 7 = 24$, and $24 \div 2 = 12$. Checking, $12 \times 2 + 7 = 31$.