Algebra & Sequences: Medium Practice Paper 5 Answers

Q#	Answer	Explanation
1	D	Replace n with 6: 8 × 6 + 2 = 48 + 2 = 50.
2	C	Add 9 to both sides: 7x = 42. Then divide by 7: x = 6.
3	C	The sequence goes up in 7s. From the 1st to the 11th term there are 10 steps, so 6 + 10 × 7 = 76.
4	B	Brackets first: 9 − 4 = 5. Then 5 × 6 = 30.
5	D	The terms are 3, then 3 × 3 − 4 = 5, then 5 × 3 − 4 = 11, then 11 × 3 − 4 = 29.
6	A	Collect the m terms: 10m − 6m = 4m. Then the numbers: −4 + 9 = 5, giving 4m + 5.
7	D	The sequence goes up in 7s, so the missing term is 9 + 7 = 16.
8	B	Divide both sides by 3: n + 2 = 9. Then take 2 from both sides: n = 7.
9	A	Five books cost 5b pounds, and the £3 delivery is added once, giving 5b + 3.
10	C	Solve 4n − 1 = 43. Adding 1 gives 4n = 44, so n = 11.
11	A	The sequence goes down in 3s, so the rule contains −3n. Checking n = 1: 23 − 3 = 20, which is correct.
12	D	Division comes first: 100 ÷ 5 = 20, and then 20 + 5 = 25.
13	C	The gaps are 1, 2, 3, 4 and grow by one each time, so the next gap is 5 and the next term is 11 + 5 = 16.
14	B	Take 30 from both sides to get −2x = −18, so 2x = 18 and x = 9. Checking, 30 − 18 = 12.
15	B	The number plus 4 lots of it makes 5 lots altogether, so 5 × the number = 45, giving 45 ÷ 5 = 9.

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