

## Y7 – Autumn – Block 1 – Step 7 – Explain the term-to-term rule Answers

Question	Answer
1	a) Linear, subtract 8 each time b) Non-linear, divide by 2 each time c) Non-linear, multiply by 3 each time d) Non-linear, total the 2 previous differences and then add to the previous term e) Linear, add a half each time
2	a) Rosie has added 4 each time instead of multiplying by 4 <b>or</b> Rosie has been multiplying the position number by 4 rather than the previous term. b) 4, 16, 64, 256
3	Double the previous difference and then add onto the previous term <b>or</b> double the previous term each time.
4	a) 1, 1, 2, 3, 5, 8, 13, 21 b) 9 <sup>th</sup> term which is 34
5	a) They could all be correct because a minimum of three terms are needed to determine the term-to-term rule of a sequence. b) Whitney c) Teddy, Alex and Annie d) Alex's sequence will have the greatest 5 <sup>th</sup> term as she is using the highest multiplier.
6	Multiply by 2 then subtract 100