1.1 – Extra Practice

1. Identify which of the following sequences are arithmetic. If so, determine the general term.
a) 1, 5, 10, 15, … b) 2, $2\frac{1}{2}$, 3, $3\frac{1}{2}$, …

c) 1, 4, 9, 16, … d) $-2x^{2}, -5x^{2}, -8x^{2}, -11x^{2}, …$
2. Determine the 5 first terms of the following arithmetic sequences:
a) $t\_{1}$ = 1, d = -4 b) $t\_{1}$ = -6, d = 6

c) $t\_{1}$ = 5m, d = 3 d) $t\_{1}$ = $c+1$, d = $c-2$
3. Determine the 1st term and the common difference of the following arithmetic sequences:
a) $t\_{5}=16 and t\_{8}=25$ b) $t\_{50}=140 and t\_{70}=180$

c) $t\_{2}= -12 and t\_{5}=9$ d) $t\_{7}=37 and t\_{10}=22$
4. Determine the number of terms of the following arithmetic sequences:
a) 3, 5, 7, …, 129 b) -1, 2, 5, …, 164

c) -29, -24, -19, …, 126 d) $p+3q, p+7q, p+11q, …, p+111q$
5. Let $t\_{1}=2x-5$ , $t\_{2}=3-x$ and $t\_{3}=x+1$ be 3 consecutive terms of an arithmetic sequence, Determine the value of *x*.