

31 Let $a_n = f(n)$, where $f(n) = dn + c$. Then, $f(n) = -2n + c$. Since $f(1) = -2(1) + c = 5 \Rightarrow c = 7$.

Thus, $a_n = f(n) = -2n + 7$. An alternate solution is to use the formula

$$a_n = a_1 + (n - 1)d = 5 + (n - 1)(-2) \Rightarrow a_n = -2n + 7.$$