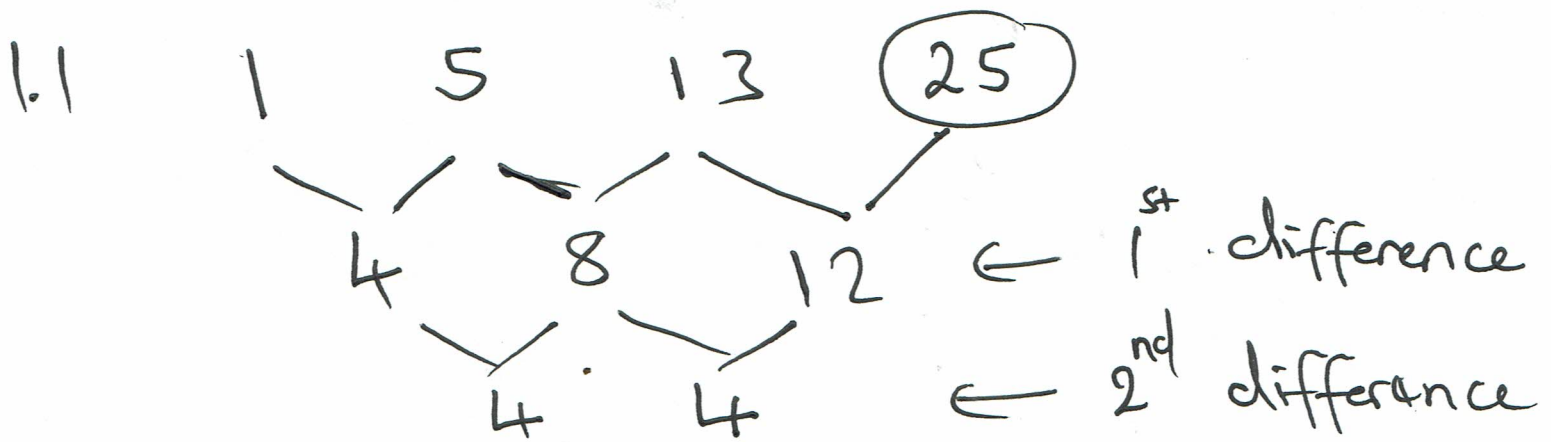


MEMO: QUADRATIC PATTERNS WITH DIAGRAMS



1.2

$$a = \frac{4}{2}, \quad 3a + b = 4, \quad a + b + c = 1$$
$$a = 2, \quad 3(2) + b = 4, \quad 2 - 2 + c = 1$$
$$\underline{a = 2}, \quad \underline{b = -2}, \quad \underline{c = 1}$$

∴ $T_n = 2n^2 - 2n + 1$

1.3

$$T_{10} = 2(10)^2 - 2(10) + 1$$
$$= 200 - 20 + 1$$
$$= \underline{181}$$