

$$\underline{11} \quad 3+6+9+12+15+18+21$$

$$a_n = 3n = 3, 6, 9, 12, 15$$

$$\sum_{i=1}^7 (3i)$$

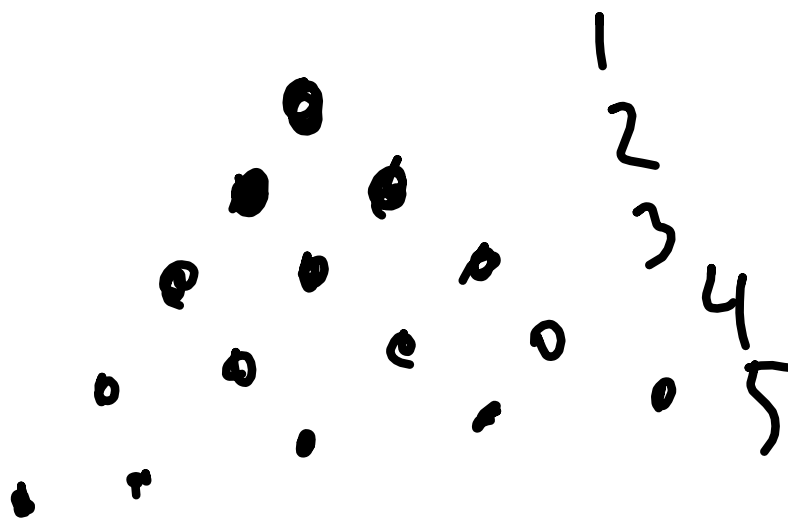
$$\sum_{k=1}^7 3k = 7 \left(\frac{3+21}{2} \right)$$

$$\underline{23}. \sum_{i=1}^{30} (\$i + 10) = 30 \left(\frac{15 + 160}{2} \right) \\ = 2625$$

25

$$\sum_{n=0}^{10} 8 - 4n = 11 \left(\frac{8 + (-32)}{2} \right) \\ = 11(-12) = -132$$

30

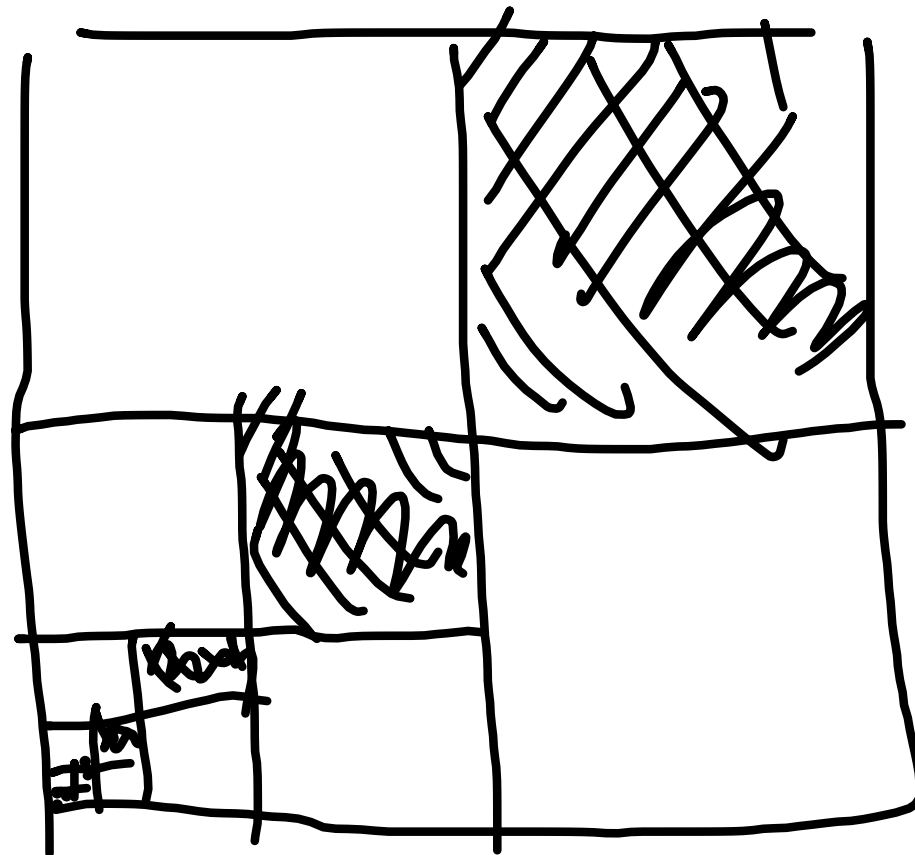


$$15400 = 1600 \text{ gwt}$$

$$\frac{m(m+1)}{2} = \sum_{i=1}^m i \cong 1600$$

$$m(m+1) \cong 3200$$

$$m = 57$$



$$\frac{1}{4} + \frac{1}{16} + \frac{1}{64} + \dots$$
$$= \frac{1}{3}$$