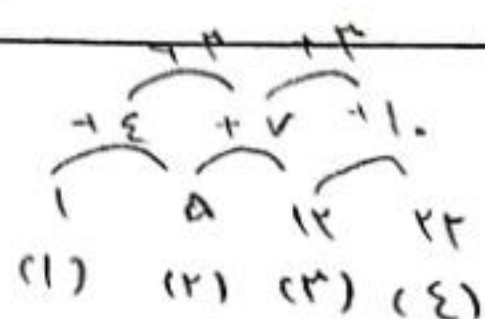
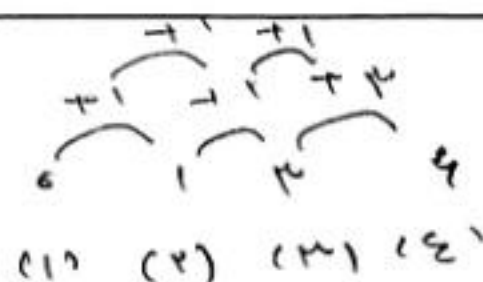




$$n + \frac{n(n-1)}{2}$$

$$t_{10} = 10 + \frac{10(10-1)}{2} = 10 + 45 = 55$$

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$$\frac{n(n-1)}{2}$$

$$\frac{n(n-1)}{2} = 55 \Rightarrow n(n-1) = 110 \Rightarrow n = 11$$

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$$1 + 2 + 3 + \dots + n \Rightarrow \frac{n(n+1)}{2}$$

$$1 + 2 + 3 + \dots + n \Rightarrow \frac{n(n-1)}{2}$$

$$t_{11} \Rightarrow \frac{11 \times 12}{2} = 66$$

$$55 + 11 = 66$$

$$55 \leftarrow \text{مجموع}$$

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$$n=1 \Rightarrow -1$$

$$n=2 \Rightarrow \frac{1}{2}$$

$$\frac{1}{2}$$

$$\frac{1}{2}$$

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$$\frac{1}{2} - (-1) = \frac{3}{2}$$

$$b_n = (-3)^n - 21 \Rightarrow -27 - 21 \Rightarrow -48$$

$$-2n + 22 = -48$$

$$-2n = -70$$

$$n = 35$$

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$$a_{10} - a_1 = 12$$

$$a_1 + 9d - (a_1 + d) \Rightarrow a_1 + 9d - a_1 - d = 12$$

$$8d = 12$$

$$d = \frac{3}{2}$$

$$a_4 - a_1 = 9$$

$$a_1 + 3d - a_1 = 9$$

$$3 \times \frac{3}{2} = 9$$

$$a_1 = 1$$

$$a_2 = 1.5$$

$$d = \frac{1.5 - 1}{2 - 1} = \frac{0.5}{1} = 0.5$$

$$a_1 = 1$$

$$a_1 = 1$$

$$1, 1.5, 2, 2.5, \dots$$

$$n - 2$$

$$\frac{1}{2}, \frac{3}{4}, \frac{5}{6}, \frac{7}{8} \Rightarrow \frac{1}{2} \Rightarrow \frac{1}{2} \Rightarrow \frac{1}{2}$$

$$\frac{1}{2} < \frac{1}{2}$$

$$n - 2 < n + 1$$

$$n < 10 \quad n = \frac{10}{2}$$

$$n < 10$$

$$9, 9, 9, 9, 0, \dots$$

$$A + 2B \Rightarrow -1, 2 + 1, 2 = 1$$

$$ax^2 + bx + c$$

$$A \Rightarrow -1, B \Rightarrow 1$$

$$A + B = 9$$

$$2A + 1B = 9$$

$$9A + 1B = 9$$

$$A + B = 1$$

$$9A + 1B = 2A + 1B$$

$$2A + B = 9$$

$$-1, -2, 0, \dots$$

$$-1, -2$$

$$a = 1 \quad c = -1$$

$$b = -1$$

$$a_1 = 1$$

$$a_2 = 2$$

$$d = \frac{1}{2} = 0.5$$

$$2n + 1$$

$$n^2 - n - 9 = 2n + 1$$

$$n^2 = 9n + 10$$

$$n = 10$$