

للاس : دقتان دهه A

(آنها سرچي)

$$a_1 \times a_2 \times a_3 = 4^3$$

$$\frac{a}{q} \times a \times aq = 4^3 = a^3 \rightarrow a = 4$$

$$a_1 + a_2 + a_3 = 21$$

$$\left(\frac{4}{q} + 4 + 4q\right) \times q$$

$$\rightarrow 4 + 4q + 4q^2 = 21q \rightarrow 4q^2 - 17q + 4 = 0$$

$$q = \frac{17 \pm \sqrt{17^2 - 4 \times 4}}{2 \times 4} = \frac{17 \pm 15}{8} = \frac{17+15}{8} = \frac{32}{8} = 4$$

$$\frac{17-15}{8} = \frac{2}{8} = \frac{1}{4}$$

$$\sqrt{q} = \frac{1}{4}$$

$$x^2 + 4, 2x, x^2 - 2$$

$$(2x)^2 = (x^2 + 4)(x^2 - 2)$$

$$1, 4, 2 \rightarrow q = \frac{1}{4}$$

$$4x^2 = x^4 - 2x^2 + 4x^2 - 1$$

$$(x^2)^2 - 2x^2 - 1 = 0$$

$$x^2 = \frac{2 \pm \sqrt{4 - (-2)}}{2} = \frac{2 \pm \sqrt{4+2}}{2} = \frac{2 \pm \sqrt{6}}{2}$$

$$S_n = a \left(\frac{q^n - 1}{q - 1} \right) = 1 \left(\frac{\left(\frac{1}{4}\right)^n - 1}{\frac{1}{4} - 1} \right) = 1 \times \frac{\frac{1}{4^n} - 1}{-\frac{3}{4}} = \frac{1 - \frac{1}{4^n}}{\frac{3}{4}} = \frac{4 \left(1 - \frac{1}{4^n}\right)}{3}$$

$$\rightarrow \frac{4 \times 127}{3 \times 4} = 15, 127$$

$$a_1 = 2^3$$

$$S_n = a \left(\frac{1 + q + q^2 + \dots + q^{n-1}}{1 + q + q^2 + \dots + q^{n-1}} \right) = \frac{2^3 \times 127}{11} = 127$$

$$-2^3, -9, \dots$$

$$128, a_1, \dots$$

$$a_{101} = a_1$$

$$q = ?$$

$$a + (n-1)d = -2^3 + 100 \times \frac{1}{4} = 1$$

$$a_1 = 128 \times q^0 = 1 \quad q^0 = \frac{1}{128} \rightarrow q = \frac{1}{4}$$

$$= \frac{4^3 - 1}{4 + 1} = \frac{4^3}{5} = 10, 5$$

$$a_n = a + (n-1)d = 1 + (4-1) \times 10, 5 = 32, 5$$

$$q^{n+1} = \frac{4^3}{1} \rightarrow q = \pm 2$$

$$a_n = aq^n = 1 \times \pm 2^n = 1 \quad \underline{1} \quad -1$$

$$A+B = \sqrt{10, 5}$$

$$A+B = 32, 5 - 1 = \sqrt{10, 5}$$

$$d = \frac{a}{-10}$$

باصغ ہائی : $\lambda - 1 = \sqrt{V}$