

نمبر: $\frac{19}{20}$ آفرین

بنا خدا
دینا ادهمی دم دخترب

$$1 \quad \frac{x}{r} \cdot x \cdot xr = 98 \rightarrow x = 7 \quad \frac{7}{r} + 7 + 7r = 21 \quad (1) \quad 1, 7, 49$$

$$2 \quad \frac{7 + 7r + 7r^2}{r} = 21 \rightarrow 7 + 7r + 7r^2 = 21r \Rightarrow 7r^2 - 14r + 7 = 0$$

$$3 \quad \text{شوی} \rightarrow r^2 - 14r + 19 = 0 \rightarrow (r-19)(r-1) \Rightarrow r = \frac{1}{19} \Rightarrow 21$$

$$4 \quad r = 7 \Rightarrow 21 \quad \text{در صورتی که سواد نه باشد نه غیر صوابی است!}$$

$$5 \quad x^2 + 4, 2x, x^2 - 2 \rightarrow 4x^2 = 4x^2 + x^4 - 2x^2 - 1$$

$$6 \quad x^4 - 2x^2 - 1 = 0 \rightarrow x = \pm 2 \quad \text{حاصل صفت} \Rightarrow x = 2 \Rightarrow 1, 4, 16$$

$$7 \quad S_v = 1 \left(\frac{\frac{1}{r^v} - 1}{\frac{1}{r}} \right) = \frac{12v}{1} \quad r = \frac{1}{r}$$

$$8 \quad a + ar + ar^2 + ar^3 + ar^4 = 9$$

$$9 \quad a(1 + r + r^2 + r^3 + r^4) = \frac{121}{11} \times 123 = \frac{14883}{11}$$

$$10 \quad d = \frac{b-a}{n+1} \Rightarrow \frac{43}{9} = 4.77 \rightarrow 1, 11, 22, 33, 44 \quad (2) \quad 1, 11, 22, 33, 44$$

$$11 \quad \text{شوی} = r^{n+1} \Rightarrow r^9 = 98 \rightarrow r = \pm 2 \Rightarrow B = \frac{1}{2}$$

$$12 \quad A + B = 32.5 + 1 = 33.5 \quad B = \frac{1}{2}$$

$$13 \quad A + B = 32.5 + (-1) = 31.5$$

$$14 \quad -14, -\frac{95}{4}, \dots \rightarrow d = \frac{-95}{4} + 14 = \frac{-95 + 56}{4} = \frac{-39}{4}$$

$$15 \quad a_n = -14 + (n-1) \frac{1}{4} \rightarrow a_{11} = 1$$

$$16 \quad 121r^v = 1 \rightarrow r = r^{-1}$$



Senobar

$$(a+rd)^r = (a+rd)(a+rd) = a^2 + r^2d^2 + 12ad = a^2 + 12ad + r^2d^2 \quad (6)$$

$$d(r^2d + 12a) = 0 \Rightarrow d = 0 \quad X$$

$$d = \frac{1}{10} a \quad \checkmark$$

$$a + rd = a + \frac{-ra}{10} \Rightarrow \frac{10a}{10} = \frac{ra}{10}$$

$$a + rd = a + \frac{-ra}{10} = \frac{ra}{10} = \frac{ra}{10}$$

$$d = \frac{ra}{10} = \frac{1}{10} \quad \checkmark$$

$$a = \frac{1}{10} = \frac{-1a}{10} \Rightarrow a = -a \quad \checkmark$$

$$(a+rd)^r = (a+rd)(a+rd) \rightarrow rd^2 - rad = 0 \quad (7)$$

$$d(rd - ra) = 0 \Rightarrow d = 0$$

$$d = a \Rightarrow a = \frac{1}{10} \Rightarrow d = \frac{1}{10}$$

$$r = \frac{1}{\frac{1}{10}} = 10$$

$$a_{10} = \frac{1}{10} \times r^9 = r^9 = 10^9$$

$$a_{10} = \frac{1}{10}$$

$$r^2ar, r^2ar^2, ar^3 \rightarrow r^2ar^2 = r^2ar + ar^3 \Rightarrow r^2ar^2 = ar(r^2 + r^2) \quad (8)$$

$$r^2ar^2 = r^2ar + ar^3 \Rightarrow r^2ar^2 = ar(r^2 + r^2) \quad \checkmark$$



$$1, \frac{V}{F}, \dots \Rightarrow d = -\frac{1}{F} \quad a_n = 1 + (n-1)\left(-\frac{1}{F}\right)$$

(9)

$$1 + \frac{-n}{F} + \frac{1}{F} = -\frac{n}{F} + \frac{1}{F}$$

(1, 1/2)

$$a_F = a + 3d \Rightarrow \frac{1}{F} + \frac{-3}{F} = \frac{0}{F}$$

$$a_n = a + nd \Rightarrow \frac{1}{F} + \frac{-V}{F} = \frac{1}{F}$$

$$a_{13} = a + 12d \Rightarrow 1 + (-12) = -1$$

$$\left(\frac{1}{F} + x\right)^2 = \left(\frac{0}{F} + x\right)(-1 + x) \Rightarrow \frac{1}{F^2} + x^2 + \frac{1}{F}x = -\frac{0}{F} + \frac{0}{F}x - x$$

$$\text{جہات دیبا} \rightarrow (-F, -0, -4, 1/2) \rightarrow q = \frac{a_2}{a_1} = \frac{-0}{-1} = \frac{0}{1} \quad +x^2 \Rightarrow x = \frac{-1}{F}$$

$$a + ar^3 + ar^9 = V^3 \Rightarrow a(r^3 + r^9 + 1) = V^3$$

(10)

$$ar^3 = a + d \Rightarrow a(r^3 - 1) = d$$

(1, 0)

$$a + 9d = ar^9 \Rightarrow a(r^9 - 1) = 9d \Rightarrow \frac{9d}{d} = r^9 + 1 \Rightarrow$$

$$r^3 = 1 \Rightarrow \boxed{r = 1}$$

$$a(1 + 1 + 1) = V^3 \Rightarrow V^3 a = V^3 \Rightarrow \boxed{a = 1}$$

$$1 + 9d = 9 \Rightarrow 9d = 9 \Rightarrow \underline{d = 1}$$

جہات نزدماً متماثر خستہ جیس مرآتند عتب با سند!

$$q = 1 \rightarrow 3a = V^3 \rightarrow a = \frac{V^3}{3}$$

$$aq^9 - a = d \xrightarrow{q=1} \frac{V^3}{3} - \frac{V^3}{3} = 0 \rightarrow d = 0$$



Genobar