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$$a \ 9b \ 9c$$

$$a + b = 9b$$

Q. ✓

Q ✓

۱۵
جلد اول
مجموع

④ ✓

$$PF_D + P_B = 1/2$$

$$1/K + B = 1/6$$

② ✓

$\frac{3}{1-2} = \boxed{3}$

۶- چون در سوال نسبت را ۵۱ م نسبت خواسته فرض می کنیم $d=1$ باشد.

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✓ - شرط مساوی $c = 2b \cdot a = 2b \cdot (-2b) = -4b^2$
 $b = \frac{a+c}{2} \Rightarrow +2b \cdot a - b$

$a^2 - 4b^2 = 0 \rightarrow a^2 + 4ab - 4b^2 = 0 \rightarrow (a+2b)(a-2b) = 0$

احتمال $a=b$ که شرط مساوی بودن نقض شده $\times$ حالت -2 $a = -2b$

$c = 2b \cdot a = 2b \cdot (-2b) = -4b^2$

$\begin{cases} a = -2b \\ b = \frac{a}{-2} \\ c = -4b^2 \end{cases} \Rightarrow r = \frac{2b}{a} = \frac{2b}{-2b} = -1 \Rightarrow \boxed{r = -1}$

A. $b^2 = ac \rightarrow a = \frac{b^2}{c}$

B. $2(2a) = 2b + c \rightarrow 4a = 2b + c$

ب جای a $\rightarrow 4(\frac{b^2}{c}) = 2b + c \xrightarrow{\times c} 4b^2 = 2bc + c^2 \rightarrow c^2 + 2bc - 4b^2 = 0$

$(\frac{c}{b})^2 + 2(\frac{c}{b}) - 4 = 0 \xrightarrow{\frac{c}{b} = x} x^2 + 2x - 4 = 0 \xrightarrow{\text{تقریب}} (x+4)(x-1) = 0 \rightarrow x = -4 \text{ یا } x = 1$

$r = \frac{b}{c} = \frac{b}{-4b} = -\frac{1}{4} \rightarrow \frac{G_9}{G_6} = r^3 \rightarrow (-\frac{1}{4})^3 = -\frac{1}{64}$

9 - جواب $-\frac{1}{64}$

$a^2 = a_1 r / a_4 = a_1 r^3$

$\frac{a_1 r^4}{(a_1 r)^2} + \frac{a_1 r}{(a_1)^2} = 2 \rightarrow \frac{r^2}{a_1 r} + \frac{r}{a_1} = 2 \xrightarrow{\times a_1 r} r^2 + r a_1 = 2 a_1^2$

$r^2 + r = 2 \xrightarrow{\text{فاکتور}} (r-1)(r+2) = 0 \rightarrow r = 1 \text{ یا } r = -2$

$r^2 + r(1) = 2(1)^2 \rightarrow r^2 + r - 2 = 0 \xrightarrow{\text{فاکتور}} (r-1)(r+2) = 0$

$\frac{a_1 r}{a_1 r} = \frac{a_1}{r} \Rightarrow \frac{1}{r} = \frac{1}{1} = 1$

$+3 = \sqrt{4} \Rightarrow +5 = 2\sqrt{5}$

$\frac{1}{r} - 9 = ? \quad a_1, a_1 r, a_1 r^2, \dots$

$a_1 r^2 = \sqrt{a_1 r^3} \xrightarrow{\text{مربع}} a_1^2 r^4 = a_1 r^3 \rightarrow a_1 r = 1$

$a_1 r^4 = 2\sqrt{5} \rightarrow a_1 r^4 = 2\sqrt{5} \Rightarrow r^4 = \frac{2\sqrt{5}}{a_1} \rightarrow r = \sqrt[4]{\frac{2\sqrt{5}}{a_1}}$

$a_1 r = 1 \xrightarrow{r^3} a_1 = \frac{1}{r^3} \rightarrow \frac{1}{r} - \frac{1}{r^3} = \frac{1}{6}$