نام و نام خانوادگی ..... پاسخنامه تشریحی تکلیف شماره ۲۲ کلاس ..... A .....

۱

$$\frac{\alpha^2\beta^2 + 2\alpha^3 + \alpha^2\beta^3}{5} \rightsquigarrow \frac{2\alpha^3 + 2\beta^3}{5} \rightsquigarrow \frac{2(\alpha^3+\beta^3)}{5}$$

$$\frac{2(-125+30)}{5} = -76$$

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طول محور $= \frac{2\sqrt{1.5}}{2} = 0.75$

$\frac{-b}{2a} = 0.75$

$\frac{-b}{a} \rightsquigarrow 2 \times 0.75 \rightsquigarrow 1.5$ مجموع ریشه‌ها

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$2k - \frac{4}{3}k = \frac{1}{3}k$ ، $\frac{5}{3}k$ = ریشه‌ها $\frac{1}{3} \times \frac{5}{3}k = \frac{5}{9}k^2 = 5$

$k^2 = 9 \rightsquigarrow \left[\frac{k^2}{2}\right] = 3$

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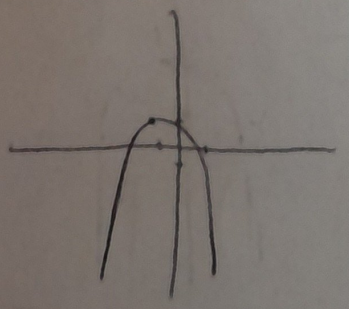

طول دهانه: $\frac{3-5}{2} = -1$

عرض $\frac{1}{5}$

$1-x$

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$S < 9 \rightsquigarrow \alpha + \beta = a$ ✓

$P < \frac{81}{4} \rightsquigarrow -m < \frac{81}{4} \rightsquigarrow m > \frac{-81}{4}$

$\Delta > 0 \rightsquigarrow 28 + 4m > 0 \rightarrow 4m > -28$

$m > -\frac{28}{4}$ → -6.25

$m = -6, -5, \ldots, 20$

تعداد ۲۷

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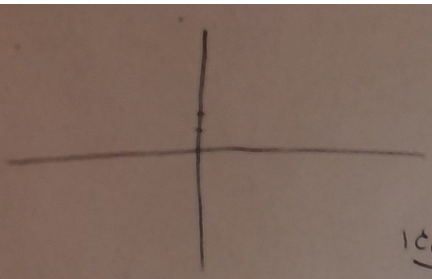

$\frac{-\Delta}{4a} = 2$

$y = 2x^2 - 12x - 14$

$x_s = \frac{12}{4} = 3$ → $m = 3$

$\frac{144 - 20m^2 + 4m}{-4m} = 2 \longrightarrow$

$\min \longrightarrow m > 0$

$20m^2 - 12m - 144 = 0$ → $m = 3$ ✓ , $m = -2.4$ ✗

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$\alpha + \beta = -2a + 2$

$\alpha\beta = 2a - 1$

$\sqrt{\alpha + \beta + 2\alpha\beta} \longrightarrow a^2 = \alpha\beta \longrightarrow a^2 = 2a - 1 \longrightarrow a^2 - 2a + 1 = 0 \longrightarrow a = 1$

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$x^2 = t \rightsquigarrow t^2 - 7t - 8 = 0$

$\Delta = b^2 - 4ac \longrightarrow 49 \longrightarrow$ جواب‌ها $= \pm\sqrt{\frac{7 + \sqrt{49}}{2}} \pm \sqrt{\frac{7 - \sqrt{49}}{2}}$

3.8 = مرتب جواب‌ها ، صفر = جواب‌ها

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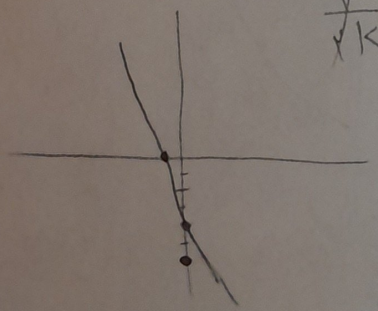

$\frac{4}{2k} = \frac{2}{k}$ ← تابع نزولی $\frac{4}{k} - \frac{1}{k} - 4 = -\frac{8}{k} - 2$

$-\frac{8}{k} - 2$ ، $k = 2$

$\cdot \; 4 - 4 - 4 = -1$

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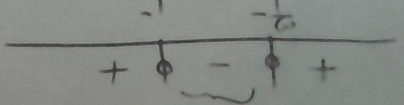
$-m - x + 1 = -mx^2 + mx + 1$

$mx^2 - (m+1)x - m - 1 \rightsquigarrow \Delta < 0 \longrightarrow b^2 - 4ac < 0$

$(m+1)^2 - m^2 + 1 + 2m$ ، $4ac = -4m^2 - 4m$

$5m^2 + 4m + 1 < 0$



$m \in (-1, -\frac{1}{5})$

$\rightsquigarrow$ جواب‌ها $= \frac{-4 \pm 2}{10} = -1, -\frac{1}{5}$ ، تعداد اعداد صحیح جواب‌ها = 1