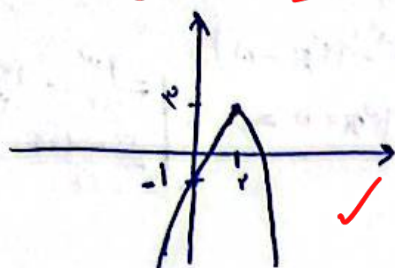


دار max

$$x_3 = \frac{-f}{-2} = 2$$

$$y_3 = -f + 1 = 3$$



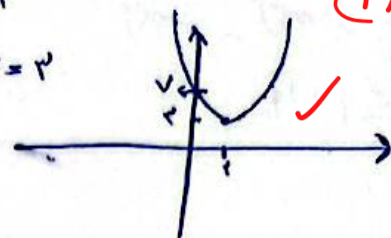
عالمی نذر! ۲۰

(-)

رسانه‌های داد بازدهی - پسر B m(n)

$$x_3 = \frac{f}{2} = 2$$

$$y_3 = f - 1 + 7 = 3$$



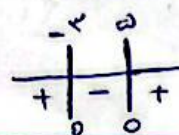
۱- (۲) اف

$$\Delta = 0 \Rightarrow \{-2, 5\} \checkmark$$

(-)

$$\Delta = m^2 + 2m + 1 - 4m - 16 = m^2 - 2m - 15$$

۲- (۲) اف



$$\Delta > 0 \Rightarrow$$

$$\mathbb{R} - [-3, 5] \checkmark$$

$$\Delta \geq 0 \Rightarrow \mathbb{R} - (-2, 5) \checkmark$$

(+)

$$\Delta < 0 \Rightarrow (-2, 5) \checkmark$$

(ج)

$$\Delta > 0 \checkmark$$

$$\begin{aligned} f < 0 &\rightarrow \frac{2(m+1)}{m-2} < 0 \\ p < 0 &\rightarrow \frac{1}{m-2} < 0 \Rightarrow m < 2 \end{aligned} \left. \begin{array}{l} \frac{-1}{-3} \quad \frac{2}{5} \\ \frac{+}{-} \quad \frac{-}{+} \end{array} \right\} \Rightarrow (-1, 2) \checkmark$$

(-)

$$\Delta = f(m^2 + 2m + 1 - 4m + 16) = f(m^2 - 2m + 21)$$

۳- (۲) اف

$$\Delta > 0 \checkmark$$

$$\begin{aligned} f < 0 &\rightarrow \frac{2(m+1)}{m-2} < 0 \\ p > 0 &\rightarrow \frac{1}{m-2} > 0 \Rightarrow m > 2 \end{aligned} \left. \begin{array}{l} \frac{-1}{-3} \quad \frac{2}{5} \\ \frac{+}{-} \quad \frac{-}{+} \end{array} \right\} \Rightarrow \emptyset \checkmark$$

$$\frac{-b}{2a} = \frac{2(m+1)}{2(m-2)} = 2$$

$$m+1 \leq -2m+4 \Rightarrow m \leq 1 \checkmark$$

(-)

۴- اف) گفته که $\frac{c}{a} < 0$ باشد، این معنی Δ خود به خود

توی هر محاسبه‌ای که باشد مثبت.

$$\frac{1}{m-2} < 0 \Rightarrow m-2 < 0 \Rightarrow m < 2 \checkmark$$

۲- (۲) اف

$$\Delta \geq 0 \quad f(\sin^2 \alpha) \geq f\left(\frac{2}{3}\right)\left(\frac{2}{3}\right) \Rightarrow \sin^2 \alpha \geq 1$$

$$\rightarrow \sin^2 \alpha \leq 1$$

$$\sin \alpha = 1 \quad \text{چون ریشه} \oplus \text{ به با توجه به فرم معادله} \quad \sin \alpha = \pm 1$$

$$\frac{2x^2}{2} - 4x + \frac{2}{2} = 0 \Rightarrow x^2 - 4x + 1 = 0 \Rightarrow (x-2)^2 = 0 \Rightarrow x = 2 \checkmark$$

۱- (۲) اف

$$\frac{-1(x+1)(3x+1)(x+1)(2x-2)}{(x+1)(1-x)} \Rightarrow -(4x^2 - 12x - 2)$$

$$x \notin \{\pm 1\}$$

$$-4x^2 + 12x + 2 \Rightarrow S \left| \begin{array}{l} -12 \\ -12 \end{array} = \frac{12}{12} \checkmark \right.$$

$$\frac{-12 - 124}{-24} = \frac{289}{24} \checkmark$$

(2) -4

$$3S - V = 0 \quad \frac{-10}{x} = \frac{V(m+2) - Vm}{x} \Rightarrow 3m + 9 - Vm + 10 = 0$$

$$14 = 6m \quad m = \frac{7}{3}$$

$$P = \frac{1}{3} \quad S = \frac{7}{3}$$

$$\alpha^2 + \beta^2 = S^2 - 2P = \frac{49}{9} + 1 = \frac{58}{9} \checkmark$$

(2) -V

$$\frac{\epsilon \alpha}{\omega \beta^2} + \frac{\beta^3}{\omega} = \frac{\beta^3}{\omega} + \frac{\epsilon \alpha \times \alpha^2}{\omega \times \frac{\epsilon}{\alpha}} = \frac{\alpha^2 + \beta^2}{\omega} = \frac{S^2 - 2P}{\omega} = \frac{120 - 40}{\omega} = 19 \checkmark$$

$$S = 0 = \alpha + \beta$$

$$P = 2 = \alpha \beta \Rightarrow \beta = \frac{2}{\alpha} \quad \beta^2 = \frac{4}{\alpha^2}$$

(2) -1

محصول تقاطع با محور عرض ها = $C = f$

$$2(2) + 6a = 14 \Rightarrow 14 = 4a + 2b + 4 \Rightarrow 4a + 2b = 10 \Rightarrow a = 1, b = 3$$

$$2(-2) + 10 = 4 \Rightarrow 4 = 4a - 2b + 4 \Rightarrow b = 2a$$

$$x_3 = \frac{-b}{2a} = \frac{-2}{2} = -1 \checkmark$$

(2) -9

وقتی میله حساب یعنی فقط 1 نقطه تماس دارند پس

$$2x^2 + (n+1)x + m + 4 = 0$$

$$2x^2 + mx + m + 4 = 0$$

$$\Delta \leq 0 \quad m^2 - 1m - 41 \leq 0$$

$$m = 12 \Rightarrow x^2 + 6x + 9 = 0 \quad x = -3$$

$$m = -1 \Rightarrow x^2 - 2x + 1 = 0 \quad x = 1$$

که یک جواب داشته باشد

(2) -10