

19,5

نام و نام خانوادگی عمران عبداللہ پاسخانمہ تشریحی تکلیف شمارہ ۷ کلاس درازدم سیر A

$$y = -\frac{1}{3}x^2 + \frac{2}{3}x + 1 = -\frac{1}{3}\left(x - \frac{2}{3}\right)^2 + \frac{28}{27}$$

$$x_s = +\frac{2}{3}$$

$$y_s = \frac{28}{27}$$

→ (2, 3) → $y = -\frac{1}{3}(x-4)^2 + 3$

ما، دے تابع ہے۔ ہر دیکھتے ہیں کہ اس جگہ

$$-\frac{1}{3}(x-4)^2 + 3 = 0 \rightarrow (x-4)^2 = 9 \rightarrow x-4 = -3 \rightarrow x = 1$$

$$x-4 = 3 \rightarrow x = 7$$

$$f(x) \rightarrow A' (1, 4) \rightarrow f(1) = 4$$

$$y = 1 - 2f(2x+2) \rightarrow A(a, B)$$

$$a \cdot B = -7 \times \left(-\frac{1}{3}\right) = \frac{7}{3}$$

$$1 - \frac{y}{2} = 4 \rightarrow y = -7 \rightarrow B = -7$$

$$2f(2x+2) = 1 - y$$

$$f(2x+2) = \frac{1-y}{2} \rightarrow 2x+2 = 1 \rightarrow 2x = -1 \rightarrow x = -\frac{1}{2} \rightarrow a = -\frac{1}{2}$$

$$w = \sqrt{2x} \rightarrow w = \sqrt{2x+2} \rightarrow -3 + \sqrt{2x+2} \rightarrow 2 + \sqrt{2x+2}$$

$$g(x) = 2 + \sqrt{2x+2} \rightarrow 2 + \sqrt{2x+2} = \frac{w}{2}$$

$$\sqrt{2x+2} = \frac{w}{2}$$

$$2x+2 = \frac{9}{4} \rightarrow 2x = \frac{1}{4} \rightarrow x = \frac{1}{8}$$

$$y = f(x-1) + g(x+1)$$

$$Dg = [-1, b), Df = (a, 4]$$

$$a < x-1 < 4 \quad -1 \leq x+1 < b$$

$$a+1 < x \leq 5 \quad -2 \leq x < b-1$$

$$(a+1, 5] \cap [-2, b-1) = (-2, 5) \rightarrow a+1 = -2 \rightarrow a = -3$$

$$b-1 = 5 \rightarrow b = 6$$

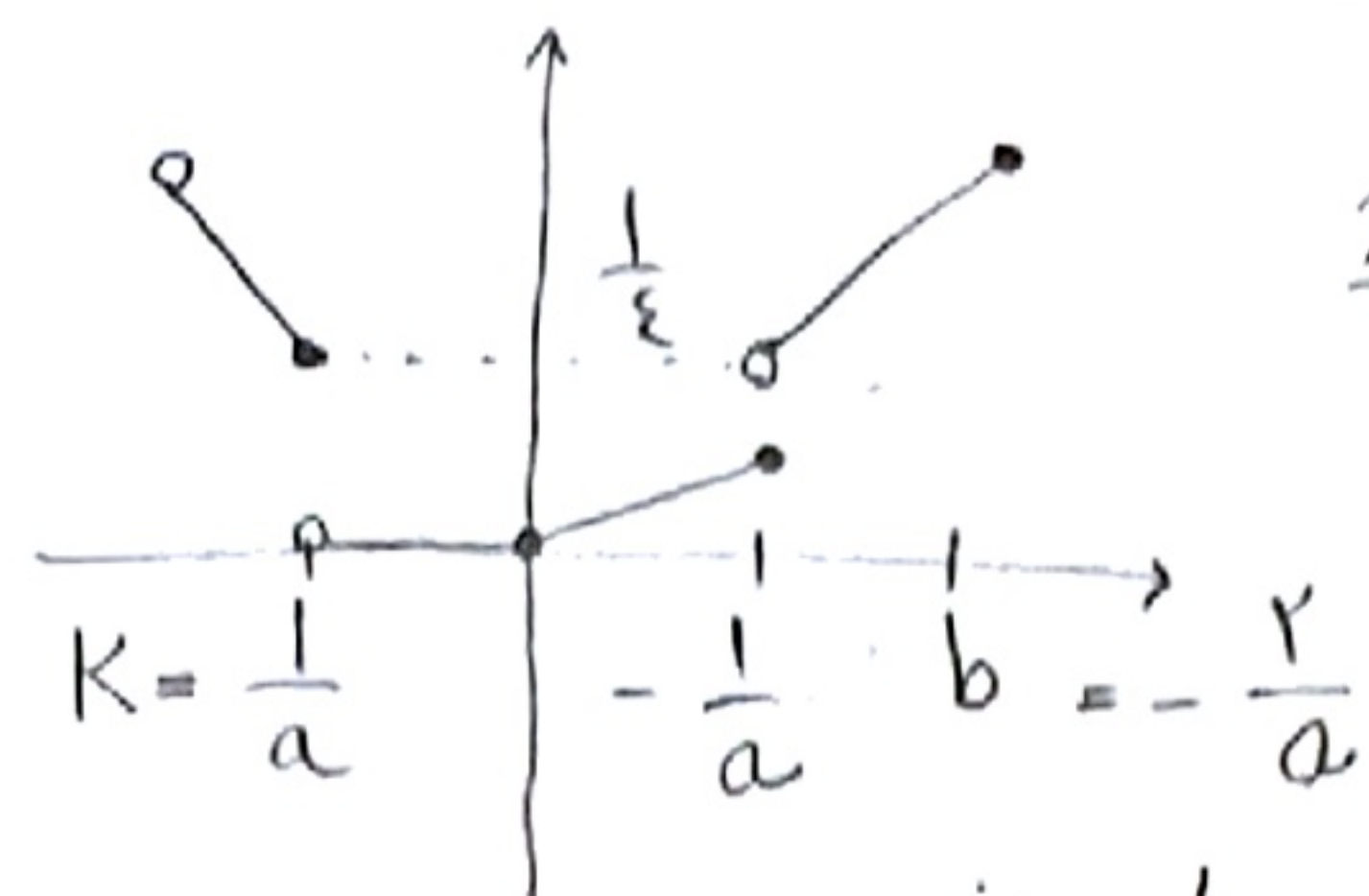
$$y_r = \sqrt{|2f(x) - 3|} \rightarrow |2f(x) - 3| \geq 0, Dg_1 = [-3, 8]$$

$$-2 \leq x \leq 8 \rightarrow -\frac{2}{3} \leq \frac{x}{3} \leq \frac{8}{3} \rightarrow -\frac{1}{3} \leq \frac{x}{3} + 1 \leq \frac{11}{3} \rightarrow f(x) \rightarrow -\frac{1}{3} \leq x \leq \frac{11}{3}$$

$$-1 \leq f\left(\frac{x}{3} + 1\right) \leq 2 \rightarrow -1 \leq f(x) \leq 2 \rightarrow -8 \leq 2f(x) - 3 \leq 1 \rightarrow 0 \leq |2f(x) - 3| \leq 8$$

$$y_r = \sqrt{|2f(x) - 3|} \rightarrow R_{y_r} = [0, \sqrt{8}]$$

$$D_{y_r} = \left[-\frac{1}{3}, \frac{11}{3}\right]$$



$$\frac{x}{a} [ax] \rightarrow [ax] = 0 \rightarrow 0 \leq ax < 1$$

$$0 \geq x > \frac{1}{a}$$

$$K = \frac{1}{a}$$

$$\frac{K}{a} [ax] = \frac{1}{2} \quad K = \frac{1}{a}, \quad \frac{1}{a} \times [1] = \frac{1}{2} \rightarrow a = \pm 2, \quad a = -2, \quad b = -\frac{1}{-2} = \frac{1}{2}$$

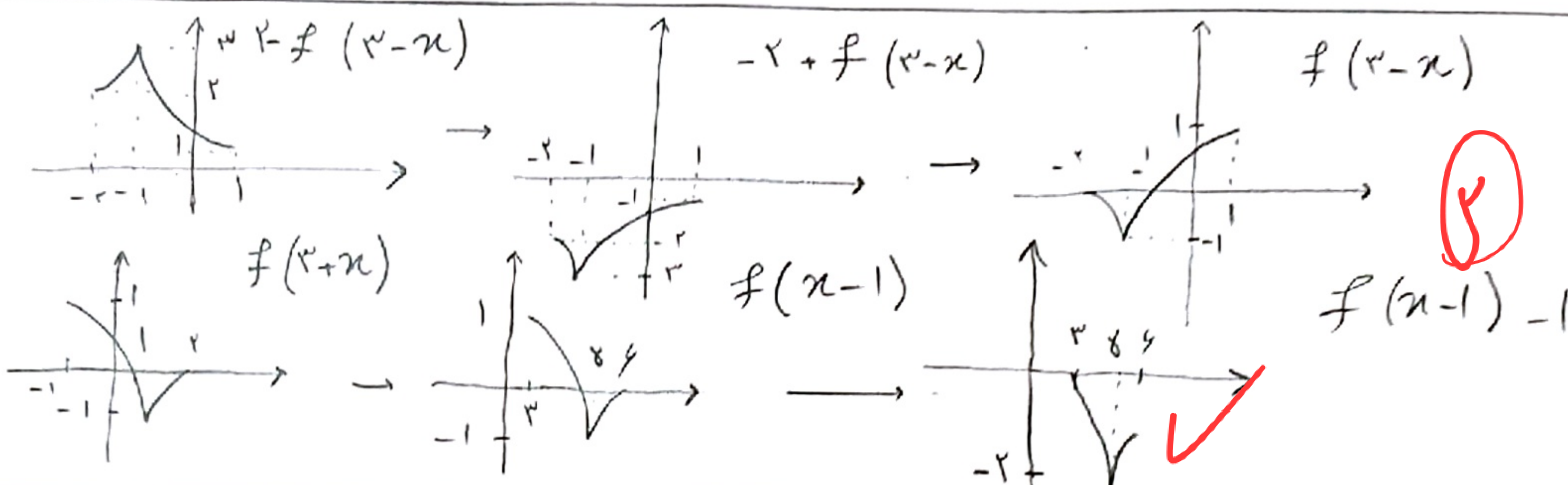
$$\log_r x \rightarrow \log_r x + r \rightarrow -\log_r x + r \rightarrow -\log_r x + r \rightarrow -\log_r x + r$$

$$g(x) = -\log_r x + r$$

$$g(-1) = -\log_r x + r = -(1) + r = -1$$

$$g(-2) = -\log_r x + r = -(2) + r = -2$$

$$g(-1) + g(-2) = -1 - 2 = -3$$



$$g(x) = \left| \frac{(x-r)+1}{r(x-r)+1} \right| + 1 \rightarrow \left| \frac{x-1}{rx-r} \right| + 1 \quad * \quad -\sqrt{r} < x < -1 \quad x \in (-\infty, -\sqrt{r}]$$

$$\left| \frac{x-1}{rx-r} \right| + x + 1 < 0 \rightarrow \left| \frac{x-1}{rx-r} \right| < -(x+1), \quad \left| \frac{x-1}{rx-r} \right| \geq 0 \rightarrow -(x+1) > 0$$

$$x+1 < 0 \rightarrow x < -1, \quad \left| \frac{x-1}{rx-r} \right| < -(x+1) \rightarrow \frac{x-1}{rx-r} < -(x+1)$$

$$\frac{x-1}{rx-r} < -(x+1) \rightarrow x-1 < -(x+1)(rx-r) \rightarrow x^2 < r \rightarrow -\sqrt{r} < x < \sqrt{r}, \quad x < -1$$

$$f(x) = K(x-r)^r + rV \rightarrow (0,0) \rightarrow f(0) = K(-r)^r + rV = 0 \rightarrow K = rV$$

$$g(x) = \sqrt{r\lambda f(x) - f'(x)} \rightarrow r\lambda f(x) - f'(x) \geq 0 \rightarrow f(x) (r\lambda - f'(x)) \geq 0$$

$$0 \leq f(x) \leq r\lambda \rightarrow 0 \leq x \leq \frac{1}{r} \quad D_{g(x)} = [0, \frac{1}{r}] \rightarrow \{0, 1, r\} \rightarrow x = 0, 1, r$$

$$f(x) = 0 \rightarrow x = 0 \quad f(x) = r\lambda \rightarrow r\lambda = \frac{rV}{\lambda} (x-r)^r + rV \rightarrow 1 = \frac{rV}{\lambda} (x-r)^r$$

$$1 = \frac{rV}{\lambda} (x-r) \rightarrow \frac{rV}{\lambda} + r = x \rightarrow x = \frac{1}{r}$$