

14, VΔ

3/5/20

$$f(x) = x^r + 9x^r - 9x + mx^r + r + 1 + 1 \rightarrow 10x^r - rx + r + mx^r + m^r$$

$$f(8) = 10^r$$

$$g(x) = m + n + x + p \quad m = -10 \quad p + 1 = -10 \rightarrow p = -11$$

$$p + x = -1$$

$$x = 10 \rightarrow -10 + (-11) - 10 = -31$$

(14)

$$y = \sqrt{\frac{x-2}{(x-2)(x+2)(x^2+5)}}$$

$$\frac{-2 \pm \sqrt{4+20}}{-\frac{1}{5} \pm \frac{1}{5} + \frac{1}{5}} \quad Df = (-2, +\infty) - \{2\}$$

(الف) $x=2 \rightarrow x^2-4-8 \neq 0 \rightarrow \frac{2 \pm \sqrt{4+20}}{2} \rightarrow \frac{-2 \pm \sqrt{24}}{2}$ (2) $\frac{-2 \pm \sqrt{24}}{2}$

$$D = (-2, 2] \cup (2, +\infty)$$

$$x=2 \rightarrow \frac{2}{-1+}$$

(الف) $x=2 \rightarrow x^2-4-8 \neq 0 \rightarrow \frac{2 \pm \sqrt{4+20}}{2}$ (2) $\frac{-2 \pm \sqrt{24}}{2}$

ب) $x=2[-\infty] \neq 0 \Rightarrow [-\infty] \neq 2 \Rightarrow D = (-3, -2]$

(الف) $x(x-1) \geq 0 \Rightarrow D = [1, +\infty) \cup [-1, 0]$ (3) $\frac{1}{2}$

مفرد $\sqrt{|x|+x} \rightarrow x \geq 0$ (2)

ب) $|x|-1 \neq 0 \Rightarrow x \neq \pm 1$ (1) $\sqrt{|x+1|-x^2} \geq 0$ (1) $\wedge (2) \in [-2, 1) - \{-1\}$

$|x-2|-1 = k \rightarrow |x-2| = k+1$ (2) $\frac{1}{2}$

$|x-2| = 1 = -k \rightarrow |x-2| = 1-k$

$x-2 = 1-k$

$x-1 = 1-k+1 \rightarrow k=2$

$1 < 1$

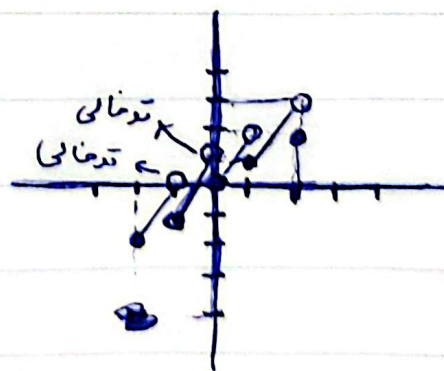
$x \in [-\infty] \rightarrow [-2, -1) \rightarrow R = [-2, 0)$

$[-1, 0) \rightarrow R = [-1, 1)$

$[0, 1) \rightarrow R = [0, 2)$

$[1, 2) \rightarrow R = [1, 3)$ ✓

$\{2\} \rightarrow R = \{2\}$



$$a = \frac{r}{a} + b, \quad 1 = \frac{0}{1+a} + b \Rightarrow b = 1$$

ن مل راه حل بنویس! چطور؟

(9)

(1, 8)

$$a < -1 \rightarrow x - r + b < x \rightarrow b < r$$

$$a < -r \rightarrow x - 1 + b < x \rightarrow b < 1$$

$$\left\{ \begin{array}{l} a - b < -2 \\ a - b = -r \end{array} \right.$$

$$f(0) = \frac{-r}{-1} = r$$

$$g(a) = a + c = r$$

$$1 + c = \frac{a+r}{b+1} = f(1) = g(1)$$

$$r = \frac{a+r}{b+1}$$

$$f(1) = g(-1) \Rightarrow$$

$$\frac{r-a}{b-1} = -1 + r = 1 \Rightarrow b-1 = r-a$$

$$\Rightarrow r = \frac{a+r}{r-a} \Rightarrow 1r - ra = a + r$$

$$a = r/a$$

$$\Rightarrow b = 0/a$$

$$b + c = r/a$$

$$Df = f_x - f_y \rightarrow f_x \geq f_y \rightarrow x \geq \frac{b}{k} y$$

1
(2)

$$Dg = b - f_x \geq 0 \rightarrow x \leq \frac{b}{k} \rightarrow \frac{b}{k} = 1 \quad \frac{f_y}{k} = 1 \rightarrow y = \frac{k}{b} b = k$$

$$f_x - f_y = x \rightarrow x = -1 \rightarrow f_x = k - y + 1 = k$$

☆ 1 و 1 صفر!

