

$$\text{الف) } (-\infty, -r] \cup [r, +\infty)$$

- 1

$$\Rightarrow n^r + \frac{1}{n} \Rightarrow (-\infty, -r] \cup [r, +\infty)$$

$$2) \sqrt{n} + \frac{1}{\sqrt{n}} \Rightarrow (-\infty, -r] \cup [r, +\infty)$$

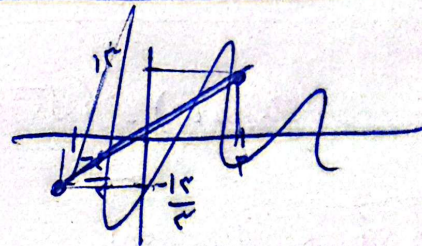
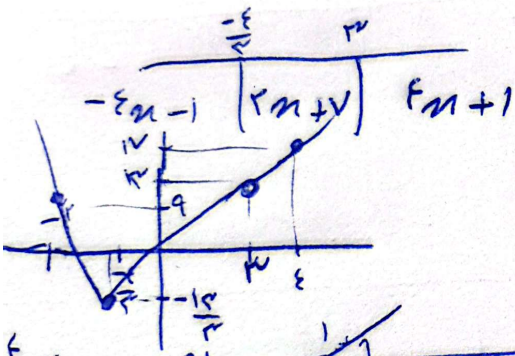
$$3) [r, +\infty)$$

$$\text{الف) } \underbrace{n^r + \frac{1}{n^r + r}}_{\left[\frac{10}{r}, r + \infty\right)} - r \Rightarrow \left[\frac{1}{r}, r + \infty\right)$$

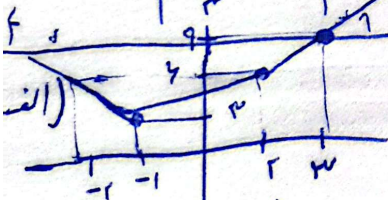
- 1

$$3) \frac{n^r + r + 1}{\sqrt{n^r + r}} = \sqrt{n^r + r} + \frac{1}{\sqrt{n^r + r}} \Rightarrow \left[\frac{r}{r}, r + \infty\right)$$

$r + \frac{1}{r}$

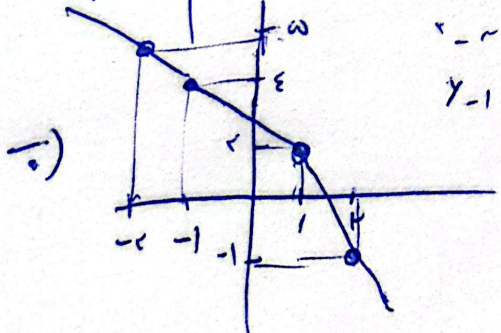


- 9



$$\Rightarrow [r, +\infty)$$

- 10



$r = r$

$r = 1$

R

الف) R

$$-) y^2 - 2ym - 1 = 0$$

$$\Rightarrow 4y^2 + 4y \geq 0 \Rightarrow 4y(y+1) \geq 0$$

$$\Rightarrow R = (-1, 0)$$

-1

$$الف) 2 \rightarrow 2 \sim [4, +\infty)$$

$$-) 3 \rightarrow 12 \rightarrow (-\infty, 12]$$

$$ج) 2 \rightarrow -1 \rightarrow \sqrt{[-4, +\infty)} \Rightarrow [0, +\infty)$$

-2

$$د) 3 \rightarrow 9 \rightarrow \sqrt{(-\infty, 9]} \Rightarrow [0, 3]$$

الف) R

-) R

$$ج) [0, +\infty)$$

$$د) [0, +\infty)$$

-3

$$الف) R = \{2\} \xrightarrow{f} R = \{2\} \xrightarrow{f} R = \{2\}$$

-4

$$1) \sqrt{R = \{2\}} \Rightarrow [0, +\infty) - \{2\}$$

-5

$$-) \sqrt{R = \{2\}} \Rightarrow [0, +\infty)$$

