

$$y = \frac{|n|+1}{|n|-2} \quad |n| = -\frac{-y-1}{y-1} = \frac{y+1}{y-1} \quad \frac{-\frac{1}{2}}{+\frac{1}{2}-\frac{1}{2}+}$$

(2)

$$R = (-\infty, -\frac{1}{2}] \cup (1, +\infty)$$

$$y = \frac{n^2+1}{|n|} = |n| + \frac{1}{|n|} \quad R = [2, +\infty)$$

$$y = \frac{n^2+2n-2}{n+2} \quad n^2+2n-2 = y(n+2) \quad n^2+(2-y)n-2-2y = 0 \quad (2)$$

$$n = \frac{(y-2) \pm \sqrt{(y-2)^2 + 4(2+2y)}}{2} \rightarrow y^2 - (y+1) + 8 + 4y \geq 0$$

$$y^2 + 3y + 7 \geq 0 \quad (y+2)(y+1) \geq 0$$

$$\frac{-4}{+4} - \frac{-2}{+4}$$

$$R = (-\infty, -4) \cup [-2, +\infty)$$

$$n^2 - n + 1 \neq 0 \rightarrow \Delta < 0 \quad \text{مردم برقرار} \rightarrow D = \mathbb{R}$$

19, 15

$$y = \frac{n^2-n+\frac{1}{2}}{n^2-n+1} \quad y(n^2-n+1) = n^2-n+\frac{1}{2}$$

$$(y-1)n^2 + (1-y)n + y - \frac{1}{2} = 0$$

$$n = \frac{(y-1) \pm \sqrt{(y-1)^2 - 2(y-1)(y-\frac{1}{2})}}{2(y-1)} \rightarrow y^2 - y + 1 - (y-1)(y-\frac{1}{2}) \rightarrow$$

مخرج غیر منفرد نہ ہو گا $\Delta = \frac{y^2}{y^2+\frac{1}{4}}$ میتھس ازروٹس مربع عدم استفادہ کی گئی

$$\rightarrow y^2 - y + 1 - (y^2 - y + \frac{1}{2}) = -\frac{1}{2}y^2 + \frac{3}{2}y \geq 0 \quad y^2 - y \leq 0 \quad y(y-1) \leq 0$$

$$R = [0, 1]$$

منسوب نمونہ صفر شد یعنی 1+3 اسے
و جمع در انزای جمع مقدری برابر یک نمونہ پس بدیبر اسے

$$p_{x+} \left| \begin{matrix} 2 \\ 3 \end{matrix} \right. \quad (-\infty, 3] \xrightarrow{\sqrt{\quad}} [0, \sqrt{3}]$$

(2)

$$p_{x+} \left| \begin{matrix} 2 \\ -8 \end{matrix} \right. \quad [-1, +\infty) \xrightarrow{\sqrt{\quad}} [-2, +\infty)$$

الف) $\frac{(n^2 - n + 1)}{n} \rightarrow R = \checkmark$

(2)

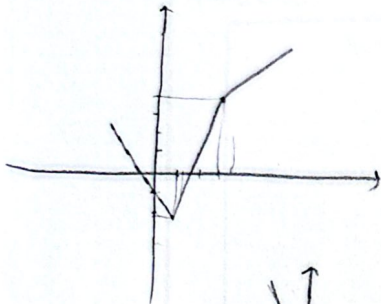
ب) $\frac{n^2 + 1}{n} \rightarrow R = (-\infty, -2] \cup [2, +\infty)$
 غير قابل تبديل - متناهي من الناحية الأصلية

$R = [1, +\infty)$

الف) $|n - 2| - |n - 3|$

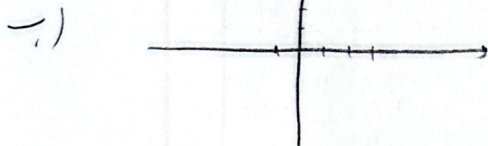
$-2n = 2 + n - 2$ $-n - 1$	$2n - 2 + n - 2$ $3n - 4$	$2n - 2 - n - 2$ $n - 4$
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(2)



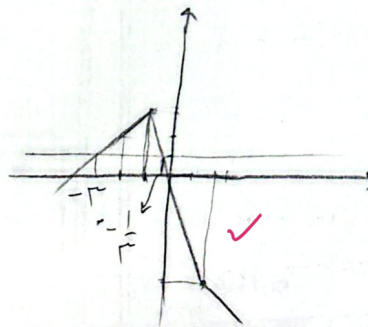
$R = [-2, +\infty)$

$R = [2, +\infty)$

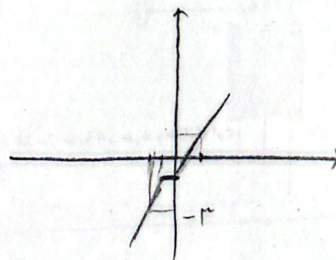


$2 - n + 2n + 2$ $n + 4$	$2 - n - 2n - 2$ $-3n$	$n - 2 - 2n - 2$ $-n - 4$
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$n \in (-\infty, -2] \cup [-\frac{1}{2}, +\infty)$



(2)

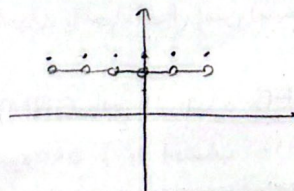


$R = \checkmark R$

(2)

$n + 2n + 1$ $-n$ $n + 1$	$n - 2n - 1 - n$ -1	$n - 2n - 1 + n$ $n - 1$
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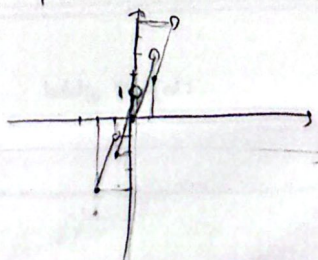
الف) $y = [n] + [-n] + 3$



$R = \{3\}$

(2)

ب) $n - [n] = \begin{cases} n + 2 & -1 \leq n < 0 \\ n + 1 & 0 \leq n < 1 \\ n & 1 \leq n < 2 \\ n - 1 & 2 \leq n < 3 \end{cases}$



$R = [0, 1)$

$$\begin{array}{l}
 1 \rightarrow 1 - 1 + 1 = 1 \\
 -1 \rightarrow 1 + 1 + 1 = 3 \\
 \frac{1}{r} \rightarrow \frac{1}{r} - \frac{1}{r} + 1 = \frac{r}{r}
 \end{array}$$

$$R_2 = \begin{bmatrix} 1 & 1 & 1 \\ 1 & 1 & 1 \\ \frac{r}{r} & \frac{r}{r} & \frac{r}{r} \end{bmatrix} \quad (2)$$

$$\begin{array}{l}
 1 \rightarrow 1 + 1 + 1 = 3 \\
 0 \rightarrow 0 + 0 + 1 = 1 \\
 -\frac{1}{r} \rightarrow \times
 \end{array}$$

$$R = \begin{bmatrix} 1 & 1 & 1 \\ 0 & 0 & 1 \\ -\frac{1}{r} & -\frac{1}{r} & -\frac{1}{r} \end{bmatrix}$$