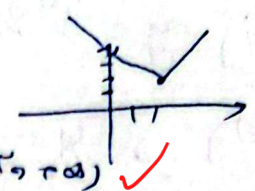
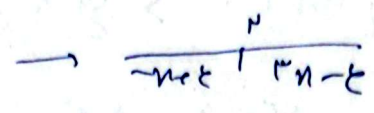


از روی نمودار

۱۸، ۱۷

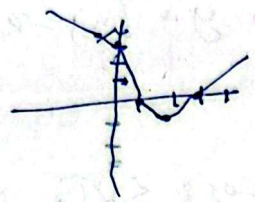
۱۷) $y = n + |n-1|$



$Ry = [2, +\infty)$ ✓

①
②

۱۸) $y = |n-1| + |n-2| - |n|$

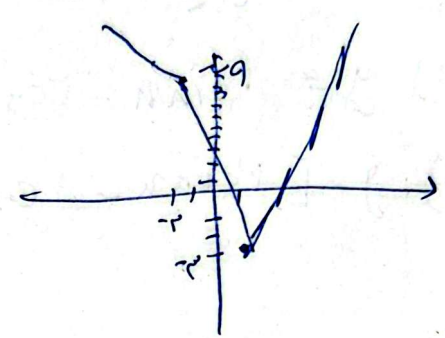
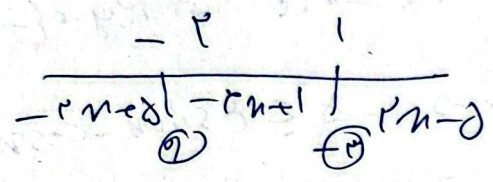


$n \leq 1 \Rightarrow y = 1$
 $n \geq 2 \Rightarrow y = 1$

$1 \leq n < 2 \Rightarrow y = 2n - 3$

$n \leq -1 \Rightarrow y = -n$

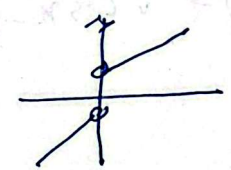
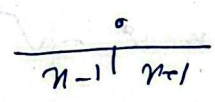
$Ry = [-1, +\infty)$ ✓



①
②

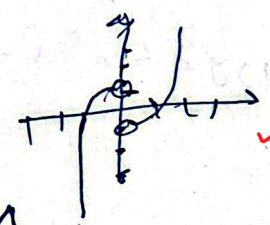
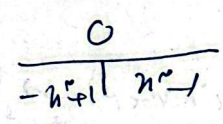
✓ پس ک از ۱ به بالا

۱۹) $y = n + \frac{n}{|n|}$

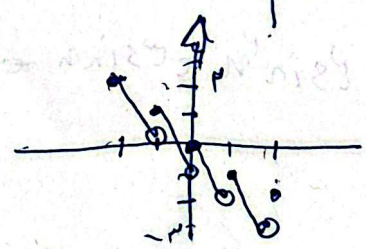


③
②

۲۰) $y = n|n| - \frac{n}{|n|}$

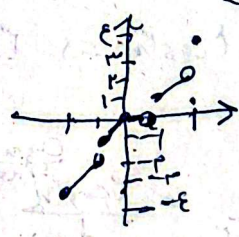


۲۱) $y = [n] - n$



①
④

۲۲) $y = [n]|n|$



باید حتماً بازه بندی هارو بنویسی

(۲) (۳)

$$y = \sin^2 x$$

$$y = \sin^2 x + \cos^2 x \rightarrow 1 \leq \sin^2 x + \cos^2 x \leq 1 \quad R_y = [1, 1] \checkmark$$

$$b) y = [\sin^2 x + \cos^2 x] \rightarrow 1 \leq \sin^2 x + \cos^2 x \leq 1 \rightarrow R_y = \{1\} \checkmark$$

$$c) y = \frac{(n+1)(n-1)}{n+1} = n-1 \quad R_y = \mathbb{R} - \{-1\} \rightarrow R_y = \mathbb{R} - \{-1\} \checkmark$$

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

$$n+1 \rightarrow \min \left| \begin{matrix} n_1 = 1 \\ n_2 = 2 \end{matrix} \right| \Rightarrow R_y = \left[\frac{3}{2}, \infty \right) \checkmark$$

$$R_y = \mathbb{R} - \{1\} \rightarrow$$

وحدی یک نقطه را حذف کنیم نقطه ۱ نیست و بر تفسیر نمی کند