

$y^3 = 2x^2 - 1 \Rightarrow y = \sqrt[3]{2x^2 - 1}$ صحیح
 جوابی دهیمون ریشه هست

$y^3 + y = 2x^2 - 1$ $y_1^3 + y_1 = 2x^2 - 1$ $y_2^3 + y_2 = 2x^2 - 1$
 $y_1^3 - y_2^3 + y_1 - y_2 = 0 \Rightarrow (y_1 - y_2)(y_1^2 + y_1 y_2 + y_2^2) + (y_1 - y_2) = 0$
 $(y_1 - y_2)(y_1^2 + y_1 y_2 + y_2^2 + 1) = 0$ $y_1 = y_2$ $y_1 = y_2 = 1$ $y = 1$ α
 جواب است

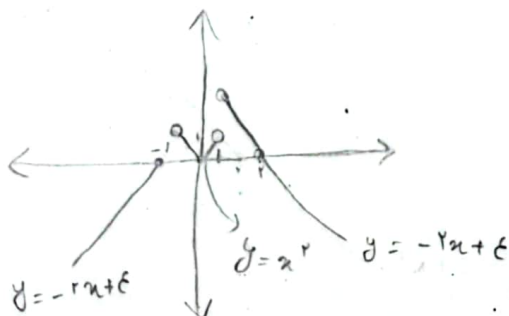
$y = x^2 - 1$ $x = 0$ $y = -1$ صحیح
 $y^3 + x^3 = 2x^2 - 1$ $x = 0$ $y = -1$ $y = 1$ α
 جواب است

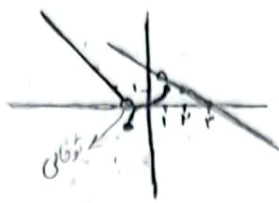
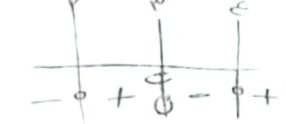
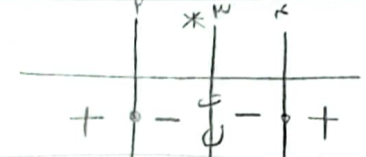
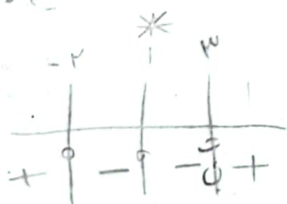
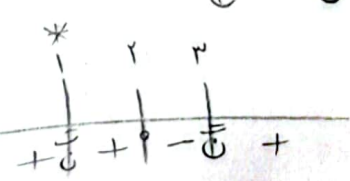
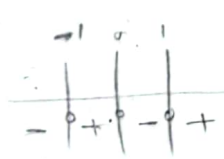
$y^3 = -1$ $y = -1$ صحیح
 $\sqrt[3]{y} + \sqrt[3]{x} = 2$ $x = 0$ $y = 8$ $y = 1$ α
 صحیح

$\tan \left(\frac{\pi}{3} \right) \rightarrow \frac{\sin \frac{\pi}{3}}{\cos \frac{\pi}{3}} = \frac{\frac{\sqrt{3}}{2}}{\frac{1}{2}} = \sqrt{3}$
 $\cot \left(\frac{\sqrt{\pi}}{5} \right) \rightarrow \frac{\cos 11.0^\circ}{\sin 11.0^\circ} = \frac{-\frac{\sqrt{3}}{2}}{-\frac{1}{2}} = \sqrt{3}$

$\tan 11.0^\circ = \frac{\sin 11.0^\circ}{\cos 11.0^\circ} = \frac{-\frac{1}{2}}{\frac{\sqrt{3}}{2}} = -\frac{1}{\sqrt{3}}$
 $\cot 11.0^\circ = \frac{\cos 11.0^\circ}{\sin 11.0^\circ} = \frac{-1}{0} = \text{تقریباً}$

$\sin a = \frac{1}{\sqrt{2}}$ $a = \frac{\pi}{4}, \frac{3\pi}{4}$
 $\cos a = \frac{\sqrt{2}}{2}$ $a = \frac{\pi}{4}, \frac{7\pi}{4}$



$y = -x + 3 \quad x > 1$ $\begin{array}{c c c} x & 1 & 3 \\ \hline y & 1 & 0 \end{array}$ $y = x^2$ $\begin{array}{c c c} x & 1 & -1 \\ \hline y & 1 & -1 \end{array}$		$y = -x - 1 \quad x < -1$ $\begin{array}{c c c} x & -1 & -3 \\ \hline y & 1 & 2 \end{array}$	6
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$\frac{x^3 - 3x + 2}{x - 2} \rightarrow x^2 - 3x + 2 \quad x - 2$ $\frac{(x-1)(x^2 + x - 2)}{(x-2)} = 0$ $\frac{(x-1)(x-2)(x+1)}{(x-2)} = 0$ $(x-1)(x+1) = 0$ $x = 1, -1$		$\frac{x^2 - 3x + 2}{x^2 - 4x + 3} = \frac{(x-1)(x-2)}{(x-1)(x-3)} = 0$ $x = 2$ 	9
$\frac{x^2 - 3x + 2}{x^2 + 2x + 3} = 0 \rightarrow x^2(x^2 - 1) \rightarrow x^2(x-1)(x+1)$ $x = 0, 1, -1$		$\frac{x^2 + 3x + 2}{x^2 + 2x + 3} = 1$ نه صورت نه مخرج ریشه حقیقی ندارد برای همین برای هر عدد حقیقی مثبت است.	10