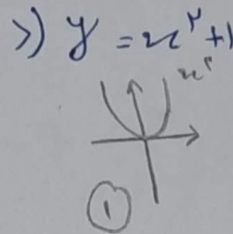
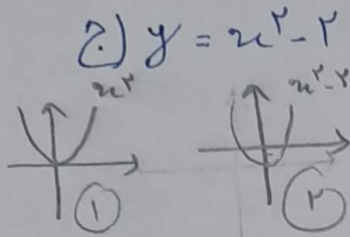
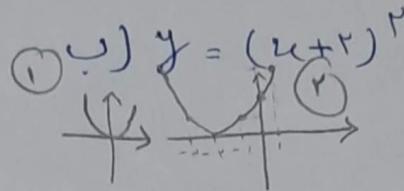
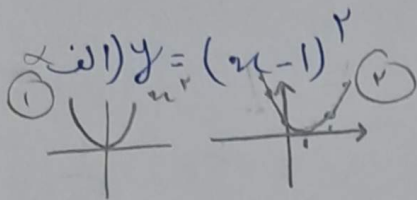
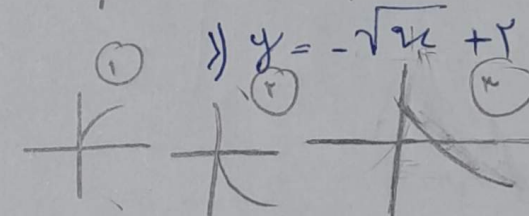
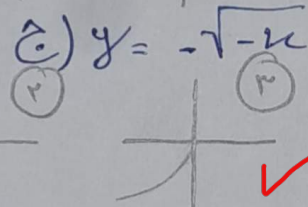
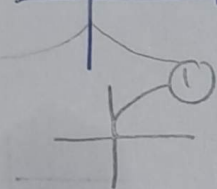
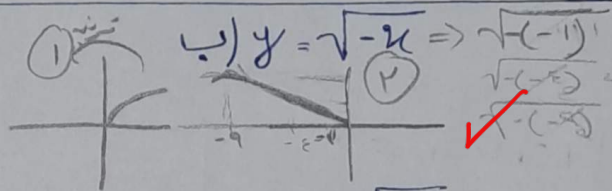
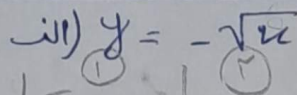
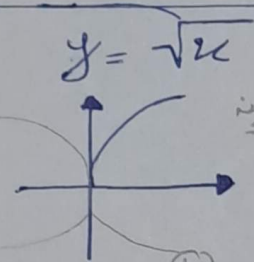


$$y = x^2$$



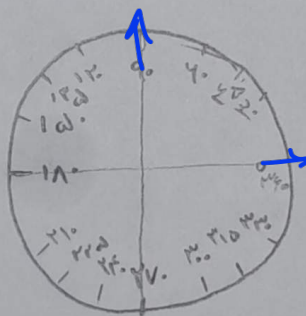
6

2



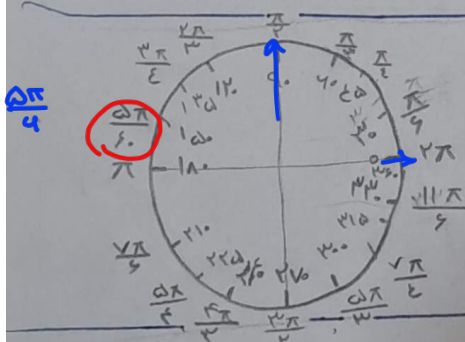
7

2



8

2



9

1.75

الف) $\cos 120^\circ = \boxed{-\frac{1}{2}}$

ب) $\sin 150^\circ = \boxed{\frac{1}{2}}$

10

ج) $\cos \frac{5\pi}{3} = \boxed{\frac{1}{2}}$

د) $\sin \frac{11\pi}{6} = \boxed{-\frac{1}{2}}$

2

سوال ۳

الف) $|y-1| = \sqrt{x-2}$

$x=3 \rightarrow |y-1| = \sqrt{3-2} \rightarrow |y-1|=1 \rightarrow y-1=\pm 1 \Rightarrow y=\frac{2}{2}, 0$

تابع نیست!

ج) $\sin^2 x + \cos^2 \frac{y}{2} = 1$

$x=0 \rightarrow \sin^2(0) + \cos^2 \frac{y}{2} = 1 \rightarrow \cos^2 \frac{y}{2} = 1 \rightarrow \cos \frac{y}{2} = \pm 1 \Rightarrow \left\{ \begin{array}{l} \frac{y}{2} = 0 \Rightarrow y=0 \\ \frac{y}{2} = \pi \Rightarrow y=2\pi \end{array} \right.$

سوال ۴

برای تابع بودن یا نبودن قرار شد

آن بهر بودیم شکل بگیرد

یا مثال نقض بزنیم (فقط برای نشان دادن تابع نبودن)

تقریباً ریاضی

ب) $y^5 + 3x = 0$
از تعریف ریاضی

$$\begin{cases} y_1^5 + 3x_1 = 0 \\ y_2^5 + 3x_2 = 0 \end{cases}$$

$x_1 = x_2$

$y_1^5 = y_2^5 \Rightarrow y_1 = y_2$

تابع هست