

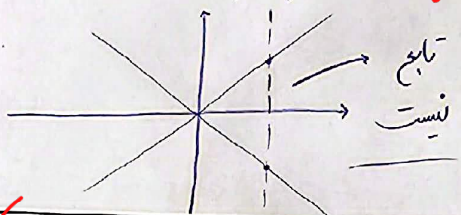
نام و نام خانوادگی علی شفیعی پاسخنامه تشریحی تکلیف شماره ۲ ... کلاس ... هم ... B

$$f_a = a^2 + 3 \rightarrow a^2 - f_a + 3 = 0 \rightarrow (a-1)(a-3) = 0 \rightarrow a = 1 \rightarrow 3$$

✓ (۲)

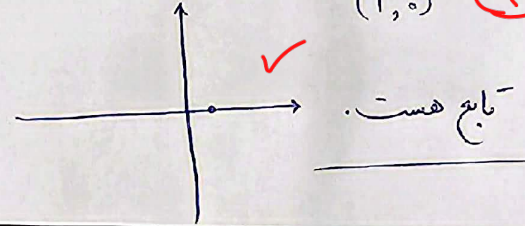
الف) $|y| = |x| \Rightarrow y = x$ یا $y = -x$

$\rightarrow x = 2 \rightarrow (2, 2), (2, -2)$



ب) $|y| + \sqrt{x-1} = 0 \rightarrow |y| \geq 0, \sqrt{x-1} \geq 0$

$\rightarrow y = 0, \sqrt{x-1} = 0 \rightarrow x-1 = 0 \rightarrow x = 1 \rightarrow (1, 0)$



الف) $x = 3 \rightarrow |y-1| = |3-2| = 1 \rightarrow |y-1| = 1 \rightarrow y-1 = 1 \rightarrow y = 2$

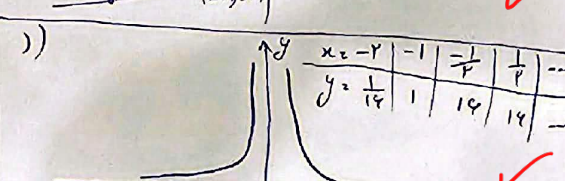
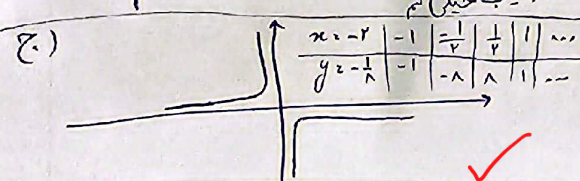
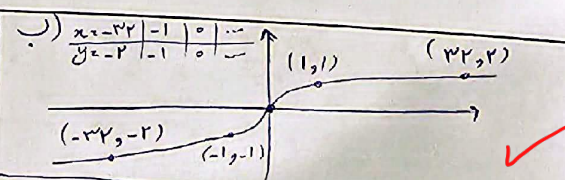
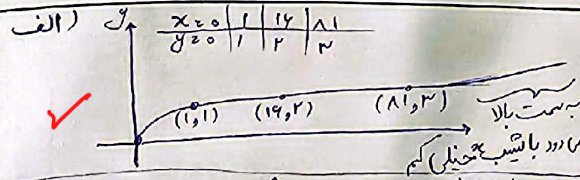
ب) $x = 0 \rightarrow y^2 - y = 0 \rightarrow y(y-1) = 0 \rightarrow y^2 - 1 = (y-1)(y+1) \rightarrow y(y-1)(y+1)(y+1) = 0$

ج) $x = 0 \rightarrow \sin^2 y = 0 \rightarrow \cos^2 y = 1 \rightarrow \cos y = \pm 1 \rightarrow y = 0 \rightarrow 2\pi$

د) $x = 0 \rightarrow 2x \times y = 0 \rightarrow$ برای همی حاصل می شود.

الف) $x^2 + |y-1| = 3x \rightarrow |y-1| = 3x - x^2 \rightarrow x = 1 \rightarrow |y-1| = 2 \rightarrow y = 3 \rightarrow 2$

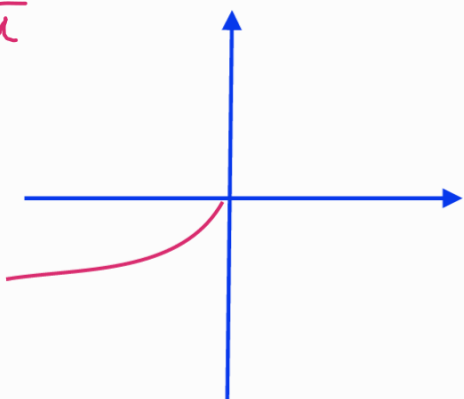
ب) $y^2 + 3x = 0 \rightarrow y^2 = -3x \rightarrow y = \sqrt{-3x}$ برای هر عدد حقیقی یک جواب حقیقی دارد.



الف)		ب)		6
ج)		د)		2
الف)		ب)		1
ج)		د)		7
				2
				9
الف) $120^\circ = 180^\circ - 60^\circ \rightarrow \cos 120^\circ = -\cos 60^\circ \rightarrow \cos 60^\circ = \frac{1}{2} \rightarrow \cos 120^\circ = -\frac{1}{2}$ ب) $150^\circ = 180^\circ - 30^\circ \rightarrow \sin 150^\circ = \sin 30^\circ \rightarrow \sin 30^\circ = \frac{1}{2} \rightarrow \sin 150^\circ = \frac{1}{2}$ ج) $\frac{5\pi}{6} = 150^\circ \rightarrow 150^\circ = 180^\circ - 30^\circ \rightarrow \cos 150^\circ = -\cos 30^\circ \rightarrow \cos 150^\circ = -\frac{\sqrt{3}}{2}$ د) $\frac{11\pi}{6} = 330^\circ \rightarrow 330^\circ = 360^\circ - 30^\circ \rightarrow \sin 330^\circ = -\sin 30^\circ \rightarrow \sin 330^\circ = -\frac{1}{2}$				10

$$y = -\sqrt{-x}$$

ج. ۱



$$y = -\sqrt{x} + 2$$

ک. ۱

