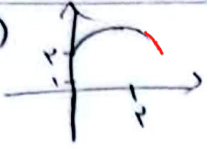
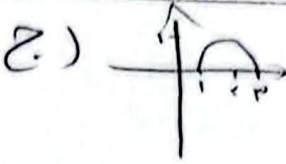
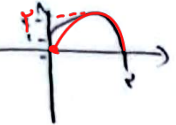
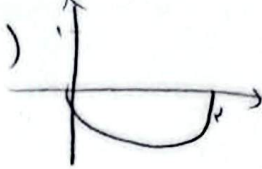
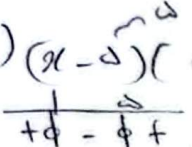
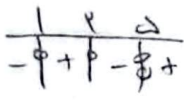
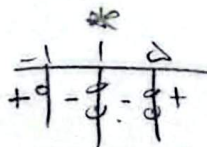
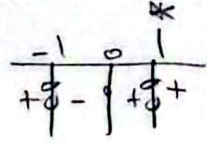
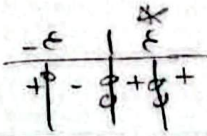


الف) 	ج) 	۱
ب) 	د) 	۲
الف) $(x-2)(x-3)$ 	$(-\infty, 2) \cup (3, +\infty)$	۳
ب) $(x-5)(x-1)$ 	ج) $(x+5)(x+1)$ 	۴
د) $(x-2)(x-1)$ 	$(-\infty, 1) \cup (2, +\infty)$	۵
ب) $(x-1)(x+1)$ 	$(-\infty, -1] \cup (1, +\infty)$	۶
الف) $(x-1)(x^2+x+1)$ 	$(-\infty, -1) \cup (0, 1) \cup (1, +\infty)$	۷
ب) $(x-5)(x+5)$ 	$(-\infty, -5] \cup (5, +\infty)$	۸
الف) $\sqrt{x-2} \geq 0$ $x-2 \geq 0$ $x \geq 2$ $x-2 \leq 0$ $x \leq 2$ $x \geq -1$ $x \leq 2$ $x \in [-1, 2]$	ب) $\sqrt{x-2} \geq 0$ $x-2 \geq 0$ $x \geq 2$ $x-2 \leq 0$ $x \leq 2$ $x \geq 1$ $x \leq 11$ $x \in [2, 11]$	۹

الف) $\sqrt{x^2 - 4} \geq 0$

$x^2 - 4 \geq 0$

$x^2 \geq 4 \quad \sqrt{x^2} \geq \sqrt{4} \quad [-2, 2]$

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ب) $\sqrt{|x| - 9}$

$|x| - 9 \geq 0 \quad |x| \geq 9 \quad |x| \geq 3 \quad x \leq -3 \text{ or } x \geq 3 \quad (-\infty, -3] \cup [3, +\infty)$

(2) ✓

الف) $|x| - 3 \neq 0$

$R = [-3, 3]$

$|x| \neq 3 \quad x \neq \pm 3$

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ب) $\sqrt{x} - 9 \neq 0$

$\sqrt{x} \neq 9$

$x \neq 81$

$[0, 9) \cup (9, +\infty)$

(2) ✓

الف)

$\cos x - 1 \neq 0$

$\cos x \neq 1$



$R = \{x \mid x \neq 2k\pi\}$

$x \neq \frac{\pi}{2}$

ب) $\sin x + 1 \neq 0$

$\sin x \neq -1$

$R = \{x \mid x \neq \frac{3\pi}{2}\}$

ليرة ✓

ج) $\cot x - 1 \neq 0 \quad \cot x \neq 1$

$\frac{\cos x}{\sin x} \neq 1 \quad \cos x \neq \sin x$

$R = \{x \mid x \neq \frac{\pi}{4} + k\pi\}$

د) $\sin^2 x - \frac{1}{4} \neq 0$

$\sin^2 x \neq \frac{1}{4} \quad R = \{x \mid x \neq \frac{\pi}{6} + k\pi, x \neq \frac{5\pi}{6} + k\pi\}$

$|x - \frac{1}{2}| - \frac{1}{4} > 0$

$|x - \frac{1}{2}| > \frac{1}{4} \quad x < \frac{3}{4} \quad x > \frac{5}{4}$

$(-\infty, \frac{3}{4}) \cup (\frac{5}{4}, +\infty)$

(2) ✓

9

الف)

$x - 2|x| \geq 0$

$2|x| \leq x$

$|x| \leq \frac{x}{2}$

$-x \leq x \leq x$

$[-2, 2]$

(2) ✓

ب) $\frac{|x|}{|x|}$

$|x| \neq 0$

$x \neq 0$

$(-\infty, 0) \cup (0, +\infty)$

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