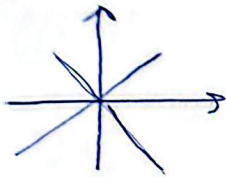


$$a^2 + 3 = 4a \rightarrow a^2 - 4a + 3 = 0 \rightarrow (a-3)(a-1) = 0$$

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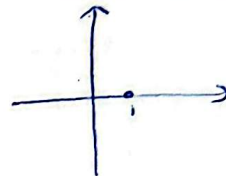
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الف)



تابع نسبت

ب



تابع هست

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الف) $a=3$ $y=290$

ب) $y(y^2-1) = \frac{a^2}{y} \rightarrow y(y^2-1)(y^2+1) = \frac{a^2}{y} \rightarrow y(y-1)(y+1)(y^2+1) = \frac{a^2}{y}$

$a=0$ $y=0, 1, -1$

ج) $a=0$ $y=0, 1, -1$

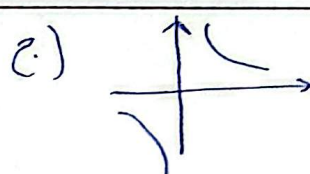
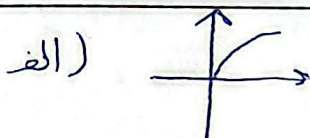
د) $a=0$ $y=\infty$

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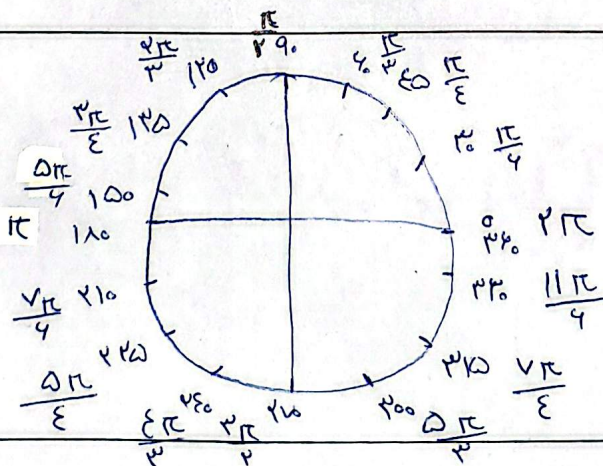
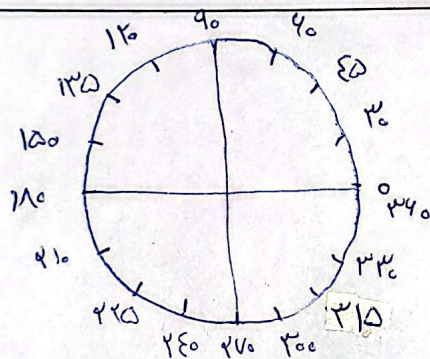
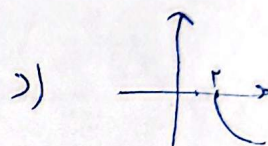
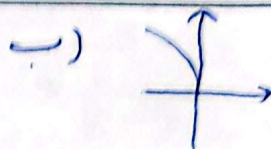
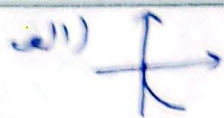
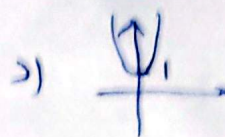
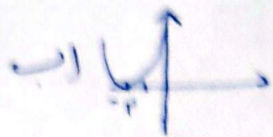
الف) $|y-1| = \varepsilon a - a^2 \rightarrow |y-1| = a(\varepsilon - a) \rightarrow a=3$ $y = \varepsilon - 4$ $\times$

د) $\left. \begin{array}{l} y_1^{\wedge} = -3a_1 \\ y_2^{\omega} = -3a_2 \end{array} \right\} a_1 = a_2 \rightarrow y_1^{\wedge} = y_2^{\omega} \rightarrow y_1 = y_2 \quad \checkmark$

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الف) $-\frac{1}{x}$

ب) $\frac{1}{x}$

ج) $\frac{1}{x}$

د) $-\frac{1}{x}$