

	-۵	۰	۲	۵
f(x)	+	۰	-	۰
x	-	-	+	+

$$\longrightarrow [-5, 0] \cup [2, 5]$$

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	-۳	۰	۲	۵
f(x)	-	+	۰	+
-x	+	+	-	-

$$\longrightarrow (-3, 0) \cup (0, 2) \longrightarrow \text{۳ عدد صحیح } -2, -1, 1$$

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$$f(x) - 2f(2) = x^2 - 3x + 6 \xrightarrow{x=2} f(2) - 2f(2) = 4 - 6 + 6 \rightarrow -f(2) = 4 \rightarrow f(2) = -4$$

$$f(-2) - 2f(2) = 4 - (3 \times -2) + 6 = f(-2) - 2f(2) = 14 \rightarrow f(-2) - 2(-4) = 14$$

$$\rightarrow f(-2) = 10$$

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$$f(5) = 5 - \sqrt{5+6} = 5 - 3 = 2 \rightarrow f(2) = 2 \times 2 + 3 = 7 \rightarrow f(f(5)) = 7$$

$$f(1) = 2 \times 1 + 3 = 5 \rightarrow f(5) = 5 - \sqrt{5+6} = 5 - 3 = 2 \rightarrow f(f(1)) = 2$$

$$f(f(5)) + f(f(1)) = 7 + 2 = 9$$

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$$f(x) = ax^2 - bx + 2 \rightarrow f(0) = 2$$

$$f(x-1) - f(x) = 4x + 2 \xrightarrow{x=1} f(0) - f(1) = 4 + 2 = 6 \rightarrow 2 - f(1) = 6 \rightarrow f(1) = -4$$

$$f(x) = ax^2 - bx + 2 \rightarrow f(1) = a - b + 2 \rightarrow -4 = a - b + 2 \rightarrow \boxed{-6 = a - b}$$

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$\frac{Vf(W) + f(-1)}{f^V(r)} \rightarrow \frac{(V \times 1) + \omega}{(-1)^V} = \frac{V}{1} = V$ $f(V) = W^V - 9 + 1 = 1$ $f(-1) = (-1)^V - (V \times -1) + 1 = \textcircled{0}$ $f(V) = V^V - (V \times V) + 1 = -1$	6
$\frac{Wf(f) - Vf(-V)}{f(V)} \rightarrow \frac{(W \times 1V) - (V \times f)}{V} = \frac{V9 - 1}{V} = \frac{V1}{V}$ $f(f) = (W \times f) + 1 = 1V$ $f(-V) = (-V)^V = f$ $f(V) = (W \times V) + 1 = V$	V
$\frac{f(f(f)) - f(f(W))}{f(1) - V} \rightarrow \frac{9 - 9}{9 - V} = \frac{0}{f} = 0$ $f(f) = 1 \rightarrow f(1) = 9 \rightarrow f(f(f)) = 9$ $f(V) = V \rightarrow f(V) = 9 \rightarrow f(f(V)) = 9$ $f(1) = 9$	1
$f(x) = \frac{x^V + fx + 9}{x^V + fx + \omega} \rightarrow \frac{V - f\sqrt{V} + (f\sqrt{V} - 1) + 9}{V - f\sqrt{V} + (f\sqrt{V} - 1) + \omega} = \frac{1}{f} = V$ $(\sqrt{V} - V)^V = V + f - f\sqrt{V}$ $f_x(\sqrt{V} - V) = f\sqrt{V} - 1$ $\frac{V^V + (f \times V) + 9}{V^V + (f \times V) + \omega} = \left(\frac{V1}{1V}\right) = f(f(\sqrt{V} - V))$ $? = f(f(\sqrt{V} - V))$	9
$f(\sqrt{x}) = (\sqrt{x})^V + \frac{1}{(\sqrt{x})^V} = x + \frac{1}{x} \rightarrow (f(\sqrt{x}))^V = \left(x + \frac{1}{x}\right)^V = x^V + \frac{1}{x^V} + V$ $(f(\sqrt{x}))^V - f(x) = x^V + \frac{1}{x^V} + V - \left(x^V + \frac{1}{x^V}\right) = \textcircled{V}$	1.