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نام و نام خانوادگی: آبریزه اکبری پاسخنامه تشریحی تکلیف شماره کلاس: A

$$y = f(x)$$

$$y = \sqrt{x} f(x)$$

$$x f(x) \geq 0$$

	-5	0	2	5
x	-	-	+	+
f(x)	+	0	-	+
xf(x)	-	0	-	+

$$D_f = [-5, 0] \cup [2, 5]$$

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$$y = \sqrt{\frac{-x}{f(x)}} \Rightarrow \frac{-x}{f(x)} \geq 0 \quad f(x) \neq 0$$

۳ عدد صحیح در این بازه وجود دارد

	-5	-3	0	2	5
-x	+	+	0	-	-
f(x)	-	0	+	0	+
$\frac{-x}{f(x)}$	-	+	+	-	-

$$D_f = (-3, 0) \cup (0, 2)$$

$$-3 < x < 0 \quad 0 < x < 2$$

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$$f(2) - 2f(1) = 4 - 2 + 2 = 2 \quad f(2) = -2$$

$$f(-2) - 2f(1) = 4 + 2 + 2$$

$$f(-1) = 10$$

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$$f(f(4)) + f(f(1)) = 7 + 2 = 9$$

$$\underbrace{f(4)}_{2 \times 2 + 2 = 6} \rightarrow \underbrace{f(6)}_{2 \times 3 + 2 = 8} = 7$$

$$\underbrace{f(1)}_{2 \times 1 + 2 = 4} \rightarrow \underbrace{f(4)}_{2 \times 2 + 2 = 6} = 2$$

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$$f(x-1) + f(x) = 2x+2$$

$$f(0) + f(1) = 2+2=4$$

$$f(x) = ax^2 + bx + c$$

$$\begin{aligned} f(1) &= a+b+c \\ f(0) &= c \end{aligned}$$

$$\begin{aligned} 2+a+b+2 &= 4 & a+b &= 0 \\ a+b &= 2 \end{aligned}$$

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$$f(x) = \frac{2x^5 + 4x^2 + 1}{2x^5 + 4x^2 + 1} = 2x^5 + 4x^2 + 1 \rightarrow (x+2)^5 + 1$$

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$$\frac{(\sqrt{x} - 2 + 2)^5 + 1}{(\sqrt{x} - 2 + 2)^5 + 1} = \frac{x}{4} = \frac{x}{4}$$

$$\frac{2x^5}{x^5} + \frac{1}{x^5} \Rightarrow x^5 + \frac{1}{x^5} \quad (x + \frac{1}{x})^5 + 1 \quad f(x) = 2x^5 + 1$$

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$$(1 - x)^5 + 1 = 11$$

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$$f = \left\{ \left(0, \frac{1}{\sqrt{2}}\right), \left(1, \frac{1}{\sqrt{2}}\right), \left(2, \frac{1}{\sqrt{2}}\right) \right\}$$

1, 5

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$$f = \left\{ \left(0, \frac{1}{\sqrt{2}}\right), \left(1, \frac{1}{\sqrt{2}}\right) \right\}$$

$$f(x) = \left\{ (2, 2), (3, 1), (4, 2), (5, 2) \right\}$$

$$f(x) = \left\{ (2, 2), (3, 2), (4, 2), (5, 2) \right\}$$

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$$f(x) = \left\{ (2, 2), (3, 2), (4, 2), (5, 2) \right\}$$

$$f(x) = \left\{ (1, 1), \left(\frac{1}{2}, 2\right), \left(-\frac{1}{2}, 2\right), \left(\frac{1}{2}, 2\right) \right\}$$

$$f = g = \left\{ (1, 2), (2, 2), (3, 2) \right\}$$

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$$f = g = \left\{ (1, 2), (2, 2) \right\}$$