

$$f(-1) = 2a - 5 \Rightarrow 2f(0) = 2a - 5 + a = 3a - 5 \Rightarrow f(0) = \frac{3a-5}{2}$$

$$\Rightarrow (a+1)(0+1) = 2a-5 \Rightarrow Va+1 = 2a-5 \Rightarrow a = -9$$

$$\sqrt{r-\sqrt{r}} = a \quad \sqrt{r+\sqrt{r}} = b$$

$$f(r-\sqrt{r}) + f(r+\sqrt{r}) = a+b + \frac{1}{a} + \frac{1}{b} + r$$

$$(a+b)^2 = r-\sqrt{r} + r+\sqrt{r} + r\sqrt{r-\sqrt{r}} = 4 \Rightarrow a+b = \sqrt{4}$$

$$\frac{1}{a} + \frac{1}{b} = \frac{a+b}{ab} = \frac{\sqrt{4}}{1} = \sqrt{4} \Rightarrow f(r-\sqrt{r}) + f(r+\sqrt{r}) = 2\sqrt{4} + r$$

$$\begin{cases} 2f(n) - 2f(-n) = 4n^2 - 2 \\ 2f(-n) - 2f(n) = 4n^2 - (-2) = 4n^2 + 2 \end{cases} \Rightarrow -2f(n) = 4n^2 + 2$$

$$\Rightarrow f(n) = \frac{4n^2 + 2}{-2} = -2n^2 - 1$$

$$x=0 \Rightarrow 2f(0) = 2m-1 \Rightarrow f(0) = \frac{2m-1}{2}$$

$$x=-1 \Rightarrow 2f(0) = 17 + 2m + 2m - 1 = 16 + 4m \Rightarrow f(0) = \frac{16+4m}{2}$$

$$\frac{2m-1}{2} = \frac{16+4m}{2}$$

$$10m + 30 = 16m - 4 \Rightarrow m = \frac{9}{2} \rightarrow f(0) = 4,5$$

$$x=x \rightarrow f(x) + f\left(\frac{1}{x}\right) = \frac{2x^2 - 12x + 5}{x}$$

$$x = \frac{1}{x} \rightarrow f\left(\frac{1}{x}\right) + f(x) = \frac{2}{x^2} - \frac{12}{x} + 5 = \frac{2}{x} - 12 + 5x$$

$$\frac{2x^2 - 12x + 5}{x} = 2x + \frac{2}{x} - 12 \quad ax + b + \frac{a}{x} + b = \frac{2x^2 - 12x + 5}{x}$$

$$x \rightarrow ax^2 + a + 2bx = 2x^2 - 12x + 5 \Rightarrow a = 2, b = -4$$

$$\Rightarrow f(x) = 2x - 4 \Rightarrow f(-1) = -2 - 4 = -6$$