

2

$$\{ (1, \sqrt{1}), (0, 2), (2, \sqrt{5}) \} \text{ و } g(x) \text{ مهم دانسته}$$

3

$$\{ (1, \frac{\sqrt{2}}{2}), (0, \frac{2}{3}) \} \text{ رب } \{ (2, \frac{0}{\sqrt{5}}), (0, \frac{2}{3}) \} \text{ و } \{ (2, \frac{0}{\sqrt{5}}), (0, \frac{2}{3}) \}$$

$$\frac{-\frac{2}{3}}{\frac{0}{\sqrt{5}}} = \frac{-\frac{2}{3} \times \frac{\sqrt{5}}{\sqrt{5}}}{\frac{0}{\sqrt{5}}} = \frac{-\frac{2\sqrt{5}}{3}}{0} = -\frac{\sqrt{5}}{1}$$

الف $\{ (2, 2), (3, 8), (-5, 4), (-1, -4) \}$

رب $\{ (2, 2), (3, 5), (-5, 3), (-1, -1) \}$

ج $\{ (2, 4), (2, 49), (-5, 3), (1, 13) \}$

د $\{ (-2, -\frac{1}{2}), (-\frac{5}{2}, 1), (-\frac{3}{2}, 4), (1, 1) \}$

1. $\{ (1, 4), (3, 2), (2, 2) \}$ الف

رب $\{ (2, 9), (3, -2) \}$

الف $\{ (2, 9), (3, 2), (1, 8) \}$

مهم دانسته

1.2

$$x f(x) \geq 0 \quad \forall x \in [-1, 0] \cup [1, 5]$$

هم علامت

صورت ؟

صورت ؟

$$\text{مختلف } \left\{ \frac{-x}{f(x)} \right\} \geq 0 \quad \text{في } (-1, 1) - \{0\}$$

$$f(x) \neq 0$$

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

$$\rightarrow f(1) = 1 \quad f(1) = -1$$

$$x=-1 \rightarrow f(-1) + 1 = 1 + 1 + 1$$

$$f(-1) = 1$$

$$f(1) = 1 + 1 \leq 0$$

$$f(0) = 0 - \sqrt{0+1} = -1 \quad \forall x \in [1, 5]$$

$$f(1) = 1 + 1 \leq 1$$

$$x=0 \quad f(0) = 1$$

$$x=1 \rightarrow f(1) - f(1) = 1 + 1 \quad f(1) = a - b + 1 = -1$$

$$-f(1) = 1$$

$$a - b = -1$$

$$f(1) = -1$$

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

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

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