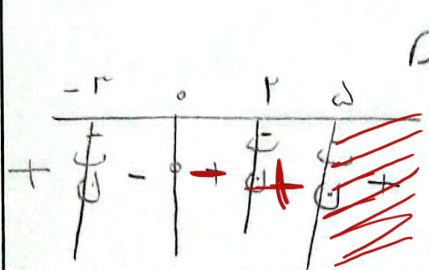


$$D_f = \{ [-5, 0] \cup [2, 5] \} \cap [-2, 5] =$$

$$\boxed{[-5, 0] \cup [2, 5]}$$

۲



$$D_f: (-\infty, -3) \cup [0, 2) \cup (5, \infty) \cap [-4, 5] =$$

$$[-4, -3) \cup [0, 2) \cup (5, \infty) \Rightarrow -4, 0, 2, 5$$

۰, ۲, ۵

$$f(r) - 2f(r) = 2 - 4 + 2 = 0 \quad \checkmark$$

$$-f(r) = 2 \quad \checkmark$$

$$f(r) = -2 \quad \checkmark$$

۱, ۵

$$f(-2) - 2f(-2) = 2 + 4 + 2 = 8 \quad \checkmark$$

$$\boxed{f(-2) = 8} \quad 10$$

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

$$f(5) = 5 - \sqrt{5+5} = 2$$

$$2 + 2 = 4$$

$$f(5) = 2$$

$$f(r) = 2 + 2 = 4$$

۵

$$a(n-1)^2 - b(n-1) + \cancel{c} - (an^2 - bn + \cancel{c}) = 7n + 1$$

$$a\cancel{n^2} + a - 2an - b\cancel{n} + b - a\cancel{n^2} + b\cancel{n} = 7n + 1$$

$$-2an + a + b = 7n + 1$$

$$\begin{cases} a = -7 \\ b = 8 \end{cases} \Rightarrow a - b = -1$$

۲

$$\frac{3+2-4\sqrt{2}+2\sqrt{2}-1+1}{\cancel{2\sqrt{2}}+2} = \frac{2-1}{2} = \frac{1}{2} = \frac{2}{4}$$

9

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

$$f(2) = 9 + 2 = 11$$

5

$$P_g = [-3, 3]$$

$$\text{الف } \left\{ (2, 0), (1, \frac{-2}{\sqrt{2}}), (0, \frac{\sqrt{2}}{2}) \right\}$$

1

$$\text{ب } \left\{ (2, \frac{\sqrt{2}}{2}), (1, \frac{\sqrt{2}}{2}), (0, \frac{\sqrt{2}}{2}) \right\} = \left\{ (1, \frac{-\sqrt{2}}{2}), (0, \frac{\sqrt{2}}{2}) \right\}$$

$$\text{الف } \left\{ (2, 2), (3, 1), (-5, 4), (1, -4) \right\}$$

1, 2, 5

$$\text{ب } \left\{ (2, 2), (3, 1), (-5, 3), (1, -1) \right\}$$

ج 0, 1, 5 مولفه دوم باید 1 + شود

$$\text{د } \left\{ (2, -2), (1, 2), (4, 4), (1, 1) \right\}$$

$$\text{الف } f - g = \left\{ (3, 2), (1, 4), (2, 2) \right\}$$

2

$$\text{ب } \frac{f}{g} = \left\{ (3, -2), (1, \frac{1}{2}), (2, 4) \right\} = \left\{ (3, -2), (2, 4) \right\}$$