

$$1) \quad r(Va + V) = -\xi + Ca \rightarrow 1 \xi a + 1 \xi = Ca - \xi$$

$$\rightarrow 10a = -11 \rightarrow \boxed{a = -1,1} \quad \left(\begin{array}{c} \text{جواب} \\ \text{داده} \end{array} \right)$$

$$2) \quad \sqrt{r-\sqrt{c}} + \frac{1}{\sqrt{r-\sqrt{c}}} + r + \sqrt{r+\sqrt{c}} + \frac{1}{\sqrt{r+\sqrt{c}}} + r =$$

$$\sqrt{r-\sqrt{c}} + \frac{\sqrt{r+\sqrt{c}}}{\sqrt{r-\sqrt{c}} \times \sqrt{r+\sqrt{c}}} + r + \sqrt{r+\sqrt{c}} + \frac{\sqrt{r-\sqrt{c}}}{\sqrt{1}} + r$$

$$= \xi + r(\sqrt{r+\sqrt{c}} + \sqrt{r-\sqrt{c}}) \quad \xi + r\left(\sqrt{\frac{\xi+\sqrt{c}}{r}} + \sqrt{\frac{\xi-\sqrt{c}}{r}}\right)$$

$$= \xi + r\left(\frac{1+\sqrt{c}}{\sqrt{r}} + \frac{\sqrt{c}-1}{\sqrt{r}}\right) = \xi + r\left(\frac{r\sqrt{c}}{\sqrt{r}}\right)$$

$$= \boxed{\xi + r\sqrt{c}} \quad \left(\begin{array}{c} \text{جواب} \\ \text{داده} \end{array} \right)$$

$$3) \quad \left. \begin{array}{l} r \times r f(n) - c f(-n) = \xi n^r - n \\ r f(n) - c f(n) = \xi n^r + n \end{array} \right\} \rightarrow \xi f(n) - \xi f(-n) = \xi n^r + n + c f(-n) - c f(n) = \xi n^r + n - \xi f(n) = \xi n^r + n$$

$$\rightarrow \boxed{f(n) = -\xi n^r - \frac{n}{\delta}} \quad \left(\begin{array}{c} \text{جواب} \\ \text{داده} \end{array} \right)$$

$$4) \quad \underline{n = -r} \quad (0) f(r) - c(-r) f(0) = 1r + r^m + r^{m-1}$$

$$\underline{n = r} \quad r f(0) - c(r) f(r) = c^m - 1$$

$$\rightarrow f(0) = \frac{c^m - 1}{r} \quad \frac{\delta m + 1 \delta}{r} \rightarrow qm - c = \delta m + 1 \delta$$

$$\rightarrow f(0) = \frac{c^m - 1}{r} \quad \frac{10, 8 - 1}{r} = \boxed{9, 1 \delta} \quad \left(\begin{array}{c} \text{جواب} \\ \text{داده} \end{array} \right)$$

Subject:

Date:

$$5) \quad f(-1) = \frac{0 + 15 + 0}{-1} = -15 \quad \left[f(-1) = -9 \right]$$

$$6) \quad D_f = (-\infty, 1], D_g = (-\infty, 1] \rightarrow \text{نقطه مشترک} \checkmark$$

$$-\sqrt{(1-x)^2} = -\sqrt{(1-x)(1-x)^2} = -|1-x|\sqrt{1-x}$$

$$= -(1-x)\sqrt{1-x} = (x-1)\sqrt{1-x}$$

$$\boxed{f(x) = g(x)} \\ \text{نقطه مشترک}$$

$$7) \quad D_f = [0, \infty), D_g = [0, +\infty) \rightarrow \text{نقطه مشترک}$$

$$\sqrt{x^2} = \sqrt{x(x^2)} = |x|\sqrt{x} \quad \left[D_{h,f}([0, \infty)) = x\sqrt{x} \right]$$

$$\rightarrow \boxed{f(x) = g(x)} \\ \text{نقطه مشترک}$$

$$8) \quad f(x) = \lfloor \sqrt{x} \rfloor - \lfloor \sqrt{x} \rfloor = 0 \rightarrow D_f = [0, +\infty)$$

$$g(x) = \sqrt{x-|x|} \rightarrow x > 0 \rightarrow \sqrt{x-x}/x < 0 \rightarrow \sqrt{x-x}$$

$$\rightarrow D_g = [0, \infty) \rightarrow f(x) = \sqrt{x-x} = 0$$

$$\rightarrow \boxed{f(x) = g(x)} \\ \text{نقطه مشترک}$$

NEGAR
COVER

$$9) \text{ a) } \frac{f+g}{f-g}(1) = \frac{r+1}{r-1} \left(z \boxed{c} \right) \left(\frac{1}{c} \right)$$

$$\text{b) } \frac{f+g}{f-g}(r) = \frac{c+c}{c-c} \cdot \frac{0 \cdot c}{0} \rightarrow \boxed{000 \times} \left(\frac{1}{c} \right)$$

$$\text{c) } f(0)g(-1) = (0) \times (1) = \boxed{0} \left(\frac{1}{c} \right)$$

$$10) \text{ a) } g(n) = f(n-1) \rightarrow c_{n-1,5} \rightarrow \underline{n=1} / c_{n-1,-1} = \underline{n=0} /$$

$$c_{n-1,0} \rightarrow \underline{n=1} / c_{n-1,-5} \rightarrow \underline{n=1} / c_{n-1,5} \rightarrow \underline{n=2} /$$

NEGAR
COVER

Subject:

Date:

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

$$1) h(n) = f(n) \rightarrow$$

$$h(n) = \left\{ (-2, 1), (2, 1), (0, 1), (-1, -1), (1, -1) \right\}$$