

$f(x) \rightarrow D_f = \{x \mid 1-x \geq 0 \rightarrow 1 \geq x\}$ $g(x) \rightarrow D_g = \{x \mid 1-x \geq 0 \rightarrow 1 \geq x\}$ $D_f = D_g \checkmark$ $x=0 \rightarrow f(0) = (-1)\sqrt{1} = -1$ $x=0 \rightarrow g(0) = -\sqrt{1} = -1 \checkmark$ $f(x) = g(x)$	6
$f(x) \rightarrow D_f = \{x \mid x \geq 0\}$ $g(x) \rightarrow D_g = \{x \mid x^2 \geq 0 \rightarrow x \geq 0\}$ $D_f = D_g$ $x=4 \rightarrow \begin{cases} f(4) = 4\sqrt{4} = 8 \\ g(4) = \sqrt{4^3} = 8 \end{cases} \quad f=g$	7
$f(x) \rightarrow x \geq 0 \quad (1)$ $g(x) \rightarrow x - x \geq 0 \rightarrow x \geq x \Rightarrow x \geq 0 = D_f$ $D_f = D_g$ $f(4) = [\sqrt{4} - [\sqrt{4}]] = [2 - [2]] = 0$ $g(4) = \sqrt{4-4} = \sqrt{0} = 0$ $f=g$	8
الف) $\frac{f(1)+g(1)}{f(1)-g(1)}$ $\frac{f(1)+g(1)}{f(1)-g(1)} = \frac{2+1}{2-1} = 3$ $\Rightarrow \frac{f(2)+g(2)}{f(2)-g(2)} = \frac{3+3}{3-3} = \frac{6}{0}$ تعریف نشده 2. $f(0) \times g(-1) = 0 \times (-1) = 0$	9
الف) $x-1 = 3 \Rightarrow x=4$ برابر با x های f باشد $\Rightarrow g(x) = \{(0,1), (0,4), (\frac{1}{3}, 5), (-\frac{1}{3}, 2), (\frac{2}{3}, -1)\}$ ب) $h(x) = \{(0,5), (2,1), (-2,1), (3,-1), (-3,-1)\}$ و روی x های غیر متفی باشند یعنی $0, 2, 3$	10