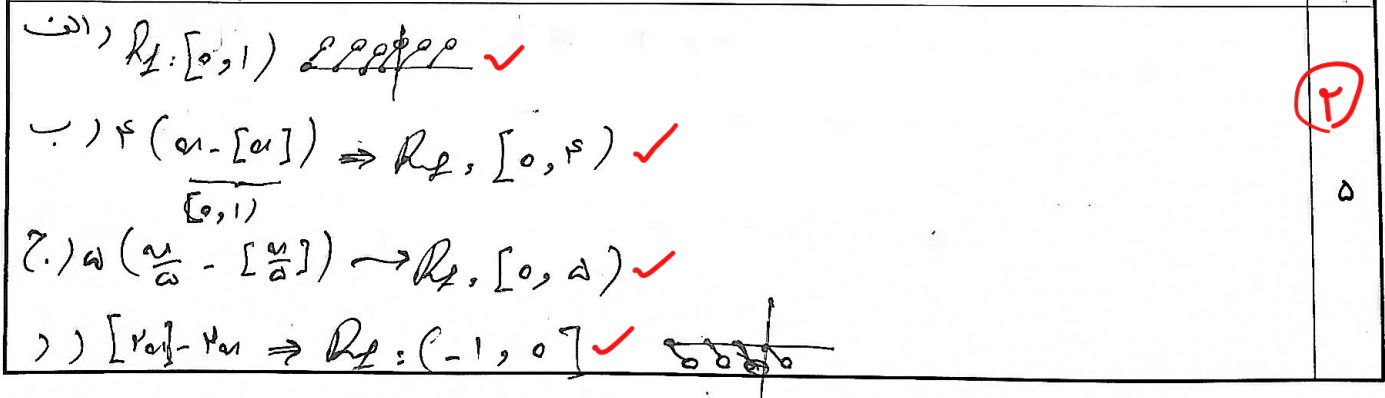
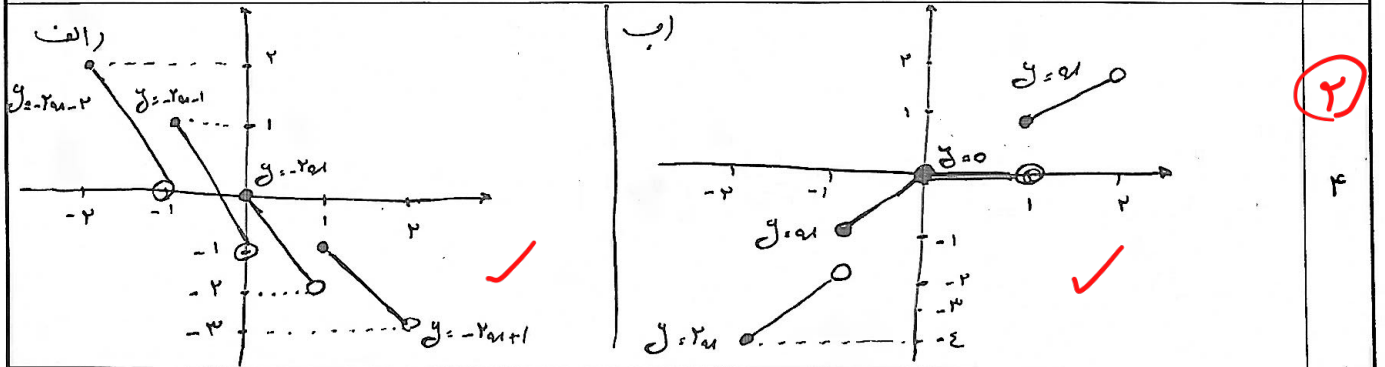
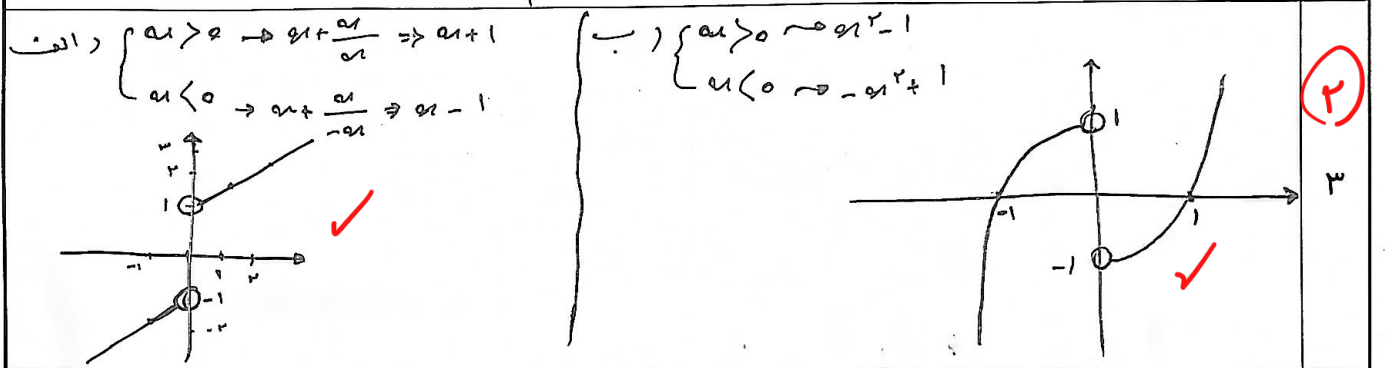
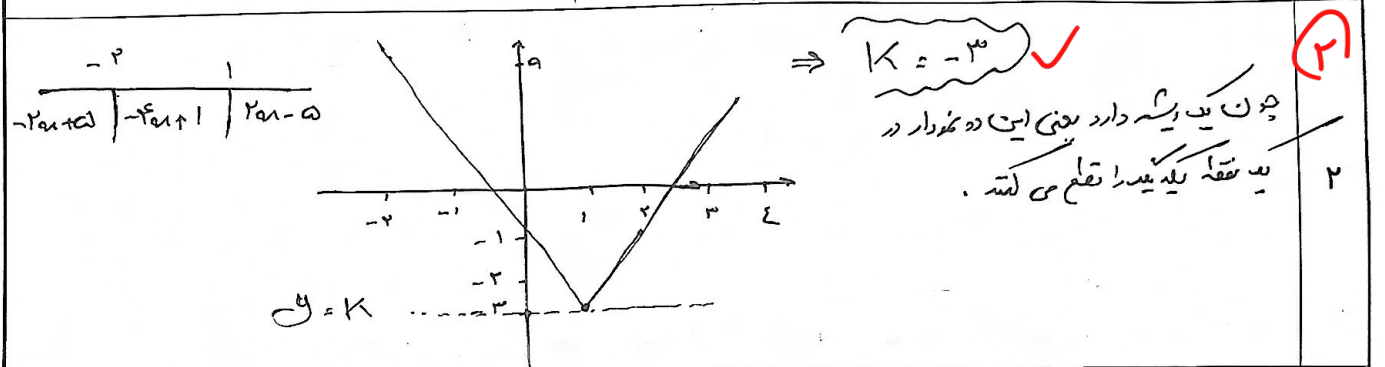
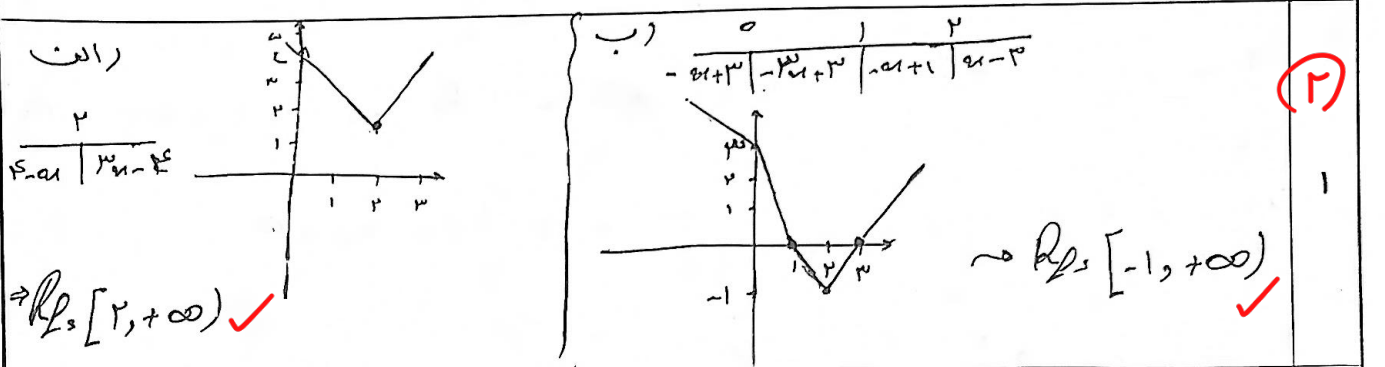
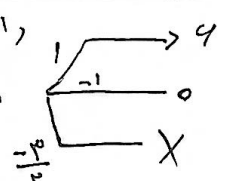
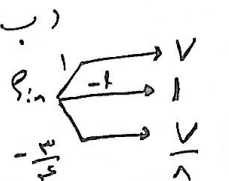


نام و نام خانوادگی کلاس شماره پاسخنامه تشریحی تکلیف شماره ۷۰ پاییز ۱۳۹۸



الف) $-\sqrt{4+9} \leq 3\sin\alpha + 2\cos\alpha \leq \sqrt{4+9} \Rightarrow R_f = [-\sqrt{13}, +\sqrt{13}]$ ✓ ب) $-\sqrt{14+9} \leq 3\sin\alpha - 3\cos\alpha \leq \sqrt{14+9} \Rightarrow R_f = [-\omega, +\omega]$ ✓ ج) $\left[\frac{2\sin\alpha + \omega\cos\alpha}{[-\sqrt{29}, +\sqrt{29}]} \right] \Rightarrow R_f: \{k \mid k \in \mathbb{Z}, -9 \leq k \leq \omega\} \subseteq R_f: \{-9, -\omega, -\varepsilon, -3, -2.5, 0, 1, 2, 3, \varepsilon, \omega\}$ ✓ د) $\sqrt{-2\sin\alpha + \cos\alpha} \rightarrow -\sqrt{\omega} \leq -2\sin\alpha + \cos\alpha \leq \sqrt{\omega} \Rightarrow R_f = [0, \sqrt[5]{\omega}]$ ✓	(7)
الف)  $\Rightarrow R_f = [0, v]$ ✓ ب)  $\Rightarrow R_f = [\frac{v}{\lambda}, v]$ ✓	(2) v
الف) $\frac{2\sin\alpha + \cos\alpha}{1} + \frac{3\cos\alpha}{[0, 1]} \rightarrow 1 + 3\cos\alpha \Rightarrow R_f = [1, 4]$ ✓ ب) $\frac{\frac{2\cos\alpha}{\sin\alpha}}{\frac{1}{\sin\alpha}} = 2\cos\alpha \rightarrow [-1, 1]$ ✓	(2) λ
الف) $\mu^{1-3} \leq \sin\alpha + \cos\alpha \leq 1 \rightarrow R_f = [\frac{1}{\mu}, 1]$ ✓ ب) $\left[\frac{\sin\alpha + \cos\alpha}{[\frac{1}{\lambda}, 1]} \right] \rightarrow R_f = \{0, 1\}$ ✓	(2) 9
الف) $\frac{(a+4)(2a-1)}{(a+4)} = 2a-1, a \neq -4 \Rightarrow R_f = \mathbb{R} - \{-4\}$ ✓	(2)
ب) $\frac{(a-1)(a^2+a+1)}{(a-1)} \Rightarrow y = a^2+a+1 \rightarrow \frac{-b}{2a} = \frac{-1}{2} \Rightarrow R_f = [\frac{3}{4}, +\infty)$ ✓ $\rightarrow (\frac{-1}{2})^2 - \frac{1}{2} + 1 = \frac{3}{4}$	10.