

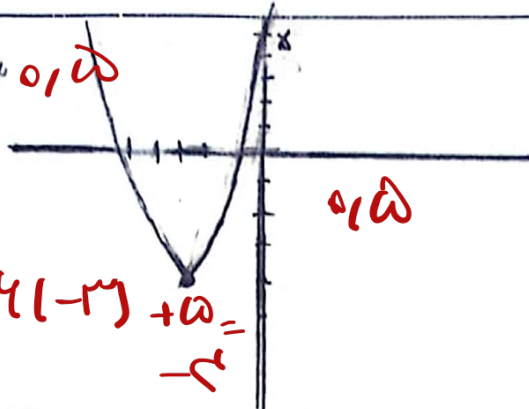
19,70

نام و نام خانوادگی کلاس پاسنامه تشریحی تکلیف شماره ۱

Min

$$\frac{-b}{2a} = \frac{-4}{2} = -2$$

-f



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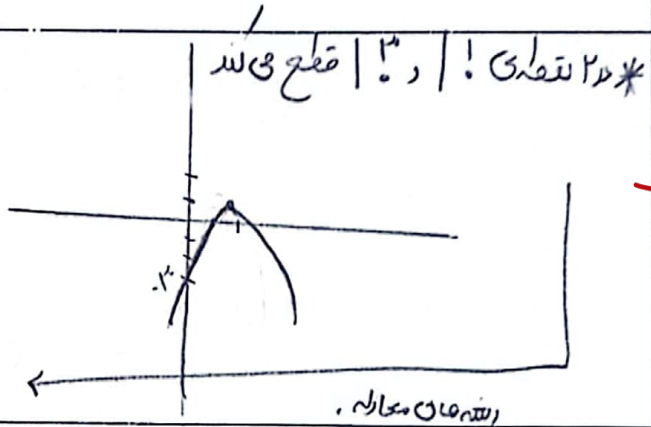
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$$J_{ext} = (-2)^2 + 4(-2) + 5 = -1$$

Max

$$\frac{-b}{2a} = \frac{-2}{-2} = 1$$

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$$-(m^2 - 2m + 1) = 0$$

$$-(m-1)(m-1) = 0 \Rightarrow m = 1$$

$$\Delta > 0 \Rightarrow b^2 - 4ac > 0 \Rightarrow 4 - 4c > 0 \Rightarrow \frac{4}{4} > c \Rightarrow 1 > c$$

$$\Delta = 0 \Rightarrow b^2 - 4ac = 0 \Rightarrow 4 - 4c = 0 \Rightarrow 4c = 4 \Rightarrow c = 1$$

$$\Delta < 0 \Rightarrow b^2 - 4ac < 0 \Rightarrow 4 - 4c < 0 \Rightarrow 4 < 4c \Rightarrow \frac{4}{4} < c \Rightarrow 1 < c$$

الف) $a < \frac{4}{4}$ (مثلاً -۲)

ب) $a = \frac{4}{4}$

ج) $a > \frac{4}{4}$

د) $a < \frac{4}{4}$

$$m^2 - 2m + 1 = 2 \Rightarrow (m-1)^2 = 2 \Rightarrow m = \pm\sqrt{2} + 1$$

$$m^2 - m + \frac{1}{4} = \frac{5}{4} \Rightarrow (m - \frac{1}{4})^2 = \frac{5}{4} \Rightarrow m = \pm\sqrt{\frac{5}{4}} + \frac{1}{4}$$

$$\Delta = b^2 - 4ac = 4 + 4 = 8$$

$$m = \frac{-b \pm \sqrt{\Delta}}{2a} = \frac{+2 \pm \sqrt{8}}{2} \Rightarrow 1 + \sqrt{2} \text{ و } 1 - \sqrt{2}$$

$$\Delta = b^2 - 4ac = 1 + 14 = 15$$

$$m = \frac{-1 \pm \sqrt{15}}{2} \Rightarrow \frac{-1 + \sqrt{15}}{2} \text{ و } \frac{-1 - \sqrt{15}}{2}$$

$$\text{الف) } (m-k)(m-v)=0 \quad \begin{cases} \rightarrow m=k \\ \rightarrow m=v \end{cases}$$

$$\text{ب) } (m+v)(m-k)=0 \quad \begin{cases} \rightarrow m=-v \\ \rightarrow m=k \end{cases}$$

$$\text{الف) } m^2 - 12m + 16 = 0 \rightarrow (m-4)(m-4)=0 \quad \begin{cases} \rightarrow m=4 \\ \rightarrow m=4 \end{cases} \quad \begin{cases} m=1 \\ m=\frac{v}{\omega} \end{cases}$$

$$\text{ب) } m^2 - 12m + 16 = 0 \rightarrow (m-4)(m-4)=0 \quad \begin{cases} \rightarrow m=4 \\ \rightarrow m=4 \end{cases} \quad \begin{cases} m=1 \\ m=\frac{v}{\omega} \end{cases}$$

$$\text{الف) } 1+k-\omega=0 \quad \rightarrow m=1$$

$$a+b+c=0 \rightarrow \rightarrow m=\frac{c}{a} = \frac{1}{2}$$

$$\text{ب) } 1+k=\omega \quad \rightarrow m=-1$$

$$a+c=b \rightarrow \rightarrow m=-\frac{c}{a} = -\frac{1}{2}$$

$$\Delta = b^2 - 4ac = 16 - 4 \times 1 \times 1 = 12 \quad \rightarrow m = \frac{\omega}{k} = \sqrt{12}$$

$$\Delta = b^2 - 4ac = 16 - 4 = 12$$

$$m = \frac{-b \pm \sqrt{\Delta}}{2a} = \frac{+4 \pm \sqrt{12}}{2}$$

$$m = \frac{\omega}{k} + \sqrt{12}$$

$$m = \frac{\omega}{k} - \sqrt{12}$$

$$S = -\frac{b}{a} \quad P = \frac{c}{a}$$

$$\text{الف) } (+4)^2 - 2(-2) = 16 + 4 = 20$$

$$\text{ب) } (+4)^2 - 2(+4)(-2) = 16 + 16 = 32$$

$$\text{الف) } \left(\frac{v}{r}\right) + \left(\frac{q}{r}\right) = \frac{v \times 4^k}{1^k} + \frac{q \times 1^k}{1^k} = 1 + 4 = 5$$

$$\text{ب) } \left(\frac{q}{k}\right) - \left(\frac{1}{r}\right) = \frac{1 \times 1 \times v}{1 \times 1} - \frac{1 \times v}{1^k} = 1 - 1 = 0$$