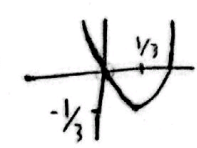
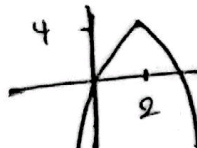
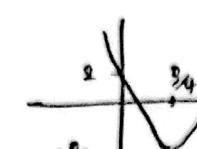
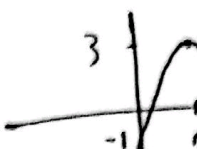


الف)  $\min \left| \begin{array}{l} 1/3 \\ -1/3 \end{array} \right.$ سوم

ب) $\max \left| \begin{array}{l} -4 \\ -2 \\ -16 \\ -4 \end{array} \right. = 2$
 $\left| \begin{array}{l} -16 \\ -4 \end{array} \right. = 4$ دوم 

الف)  $\min \left| \begin{array}{l} 3/4 \\ -9/8 \end{array} \right.$

ب) $\max \left| \begin{array}{l} 2 \\ 3 \end{array} \right.$ 

الف) $s^2 = 1/\sqrt{13} = \sqrt{13}/13$ ب) $s^2 + 2p = 1 + 6 = 7$

ج) $s^3 + 3sp = 1 + 9 = 10$ د) $p^3 + 3pD = 13\sqrt{13} - 2\sqrt{13} = 4\sqrt{13}$

$y=0 \rightarrow x-2=c \Rightarrow x=2 \checkmark$

$x^2 - ax + a = 0 \rightarrow x^2 - 4x + 4 = c \Rightarrow x=2 \checkmark$

$\Delta = c$

$a^2 - 4a = 0 \Rightarrow a = 4 \checkmark$

$\alpha^2 + \beta^2 + \alpha^2 - 4\alpha = 7$ $\alpha + \beta = 4 \Rightarrow \alpha - 4 = -\beta$

$s^2 - 2p + \alpha(\alpha - 4) = 7$

$16 + 3 \times (\frac{\alpha}{3}) = 7 \Rightarrow a = -9$

$\left. \begin{array}{l} s=4 \\ p=3 \end{array} \right\} \alpha=1, \beta=4$

$\frac{\alpha}{\beta} = \frac{-9}{4}$

f

$$20(\alpha^2 - 2\rho) + 20(\beta^2 - \beta) = 17$$

$$a(\beta^2 - \beta) = b \Rightarrow \beta^2 - \beta = \frac{b}{a}$$

$$20 + 40\frac{b}{a} + 20\frac{b}{a} = 17$$

$$-20u^2 + 20u + 1 = 0$$

$$\Rightarrow 60\frac{b}{a} = -3 \Rightarrow \frac{b}{a} = -\frac{1}{20}$$

$$D = \frac{\sqrt{\Delta}}{|a|} = \frac{\sqrt{320}}{20} = \frac{\sqrt{20}}{5}$$

v

A

9

1.