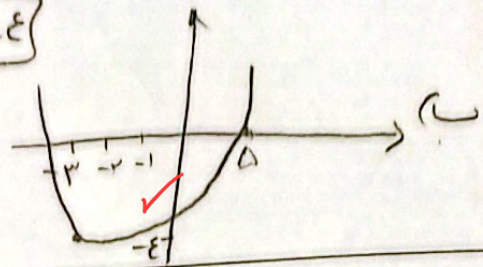


الف) $\min \left| \frac{-b}{2a} = \frac{-4}{2} = -2 \right| \checkmark$
 $\left| \frac{9}{(-2)^2} + 4(-2) + 5 = 9 - 8 + 5 = 6 \right| \checkmark$

$b = 4$

(الف)

(۲)



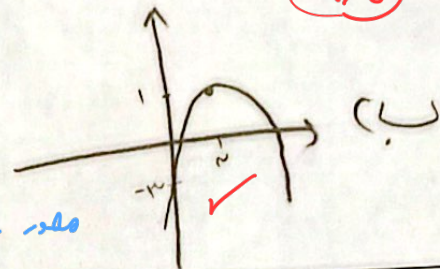
ب) $\max \left| \frac{-b}{2a} = \frac{-4}{-2} = 2 \right| \checkmark$

$b = -4$

(ب)

(۱, ۵)

$\left| \frac{9}{(2)^2} + 4(2) + 5 = 9 + 8 + 5 = 22 \right| \checkmark$



مقدار x ها: ۱، ۳ و ۵. در نقاط $x=1$ و $x=3$ مقدار y کم است.

$\Delta > 0 \rightarrow 9 - 16a > 0 \rightarrow 9 > 16a \rightarrow a < \frac{9}{16}$ $\checkmark$

ب) $9 - 16a = 0 \rightarrow a = \frac{9}{16}$

$9 - 16a < 0 \rightarrow 9 < 16a \rightarrow a > \frac{9}{16}$

$9 - 16a > 0$

$a > \frac{9}{16} \rightarrow a < \frac{9}{16}$ $\checkmark$

الف) $x^2 - 2x + \frac{1}{4} = 2 \rightarrow (x-1)^2 = 2 \rightarrow x-1 = \pm\sqrt{2} \rightarrow x = 1 \pm \sqrt{2}$

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

$(x^2 - x + \frac{1}{4}) - 1 - \frac{1}{4} = 0$

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

$x < 1 + \sqrt{2}$
 $x < 1 - \sqrt{2}$

$\Delta = 1 - (-4) = 5$

ب) $x = \frac{1 \pm \sqrt{5}}{2}$

بارش مربع x را در نظر بگیرید
 در نظر بگیرید

الف) $\Delta = b^2 - 4ac = (-4)^2 - 4(1)(-1) = 20$

$x = \frac{4 \pm \sqrt{20}}{2} \checkmark \checkmark$

ب) $\Delta = b^2 - 4ac = (-4)^2 - 4(1)(-1) = 20$

$x = \frac{4 \pm \sqrt{20}}{2} \checkmark \checkmark$

$$(n-7)(n-4)=0 \rightarrow n=7 \text{ ✓}$$

$$\rightarrow n=4 \text{ ✓}$$

(2)

$$(n+7)(n-4)=0 \rightarrow n=-7 \text{ ✓}$$

$$\rightarrow n=4 \text{ ✓}$$

$$x^2 - 12x + 20 = 0 \rightarrow (x-7)(x-5) = 0 \rightarrow x=7 \rightarrow \frac{7}{5}$$

$$\rightarrow x=5 \rightarrow \frac{5}{7}$$

(1)

با جواب های زیری تعیین ر ضریب x^2 شود

$$x^2 - 10x + 21 = 0 \rightarrow (x-3)(x-7) = 0 \rightarrow x=3 \rightarrow \frac{3}{7}$$

$$\rightarrow x=7 \rightarrow \frac{7}{3}$$

$$n=1 \text{ ✓}$$

$$\rightarrow n = \frac{c}{a} = \frac{3}{5}$$

$$\Delta = 25 - 1 = 24$$

$$n = \frac{d \pm \sqrt{\Delta}}{e} \text{ ✓}$$

(1, 8)

$$n=-1 \text{ ✓}$$

$$\rightarrow n = -\frac{c}{a} = -\frac{3}{5}$$

$$x^2 + 7x + 9 = 1$$

$$(x+4)(x+5) = 1$$

$$x+4=1 \rightarrow x=-3$$

$$x+5=1 \rightarrow x=-4$$

Δ منفی است و عبارت ریشه ندارد $9 - 4 = 5$

$$9 - 4 = 5 \text{ ✓}$$

$$S = -\frac{b}{a} = \frac{7}{1} = 7$$

$$P = \frac{c}{a} = -\frac{9}{1} = -9$$

(2)

$$27 - (1) = 26 \text{ ✓}$$

$$\left(\frac{7}{5}\right) \rightarrow \frac{7 \times 4 \times 0!}{5 \times 1 \times 2} = 21$$

$$\left(\frac{5}{7}\right) \rightarrow \frac{5 \times 4 \times 1!}{7 \times 1 \times 2} = 34 \rightarrow 21 + 34 = 55$$

(1, 50)

$$\left(\frac{9}{7}\right) \rightarrow \frac{9 \times 4 \times 1!}{7 \times 1 \times 2} = 26$$

$$\left(\frac{7}{9}\right) \rightarrow \frac{7 \times 4 \times 1!}{9 \times 1 \times 2} = 16 \rightarrow 26 + 16 = 42$$

$$\left(\frac{9}{7}\right) = \frac{4!}{1! \times 3!} = \frac{4 \times 1 \times 1 \times 1}{1 \times 1 \times 2} = 12 \times 1 \times 1 \times 1 = 12$$