

$1 < x < 3$  صندیقچه‌های عددی  $s = 4 = -(a) \Rightarrow a = -4$  (۴)  
تعداد دیگر تغییراتی است  $p = 3 = \frac{b}{1} \Rightarrow b = 3$  (۳)  
 $a + b = -4 + 3 = -1$  (✓)  
 $4 + 3 = 7$  (✓)  
 $x^2 - 4x + 3 = 0$   
 $x = 2 \Rightarrow 4 - 8 + 3 < 0$   
 $x = 1$

$y = ((k-2)x + m-1)(x-3)^2$  از آنجا که  $x = -1$   $n = -1$  (۲)  
نوع  
 $n = -\frac{1}{3}$  از آنجا که  $x = 4$   $k-2 = 1$   $k = 3$   
 $m-1 = -4 \Rightarrow m = -3$   $\frac{m}{n} + k = \frac{-3}{-\frac{1}{3}} + 3 = 9 + 3 = 12$  (۱۲)

$y = -\frac{1}{2}x^2 + 2x + 5 \Rightarrow x^2 + 4x - 10 = 0$  (۳)  
 $\Rightarrow x = 1$   $-\frac{1}{2} = -2$   $2i - 5 = 5$   
 $(-1, \infty) \Rightarrow b - a = \infty - (-1) = 5$  (۵)  
جواب  
 $-\frac{1}{2}x^2 + 4x + 5 = \frac{5}{2} \Rightarrow -\frac{1}{2}x^2 + 4x + \frac{5}{2} = 0 = x \in \{\infty, -1\}$   
 $x = \infty$  و  $y = \frac{5}{2}$


$f(x) = x^2 - 4x^2 - x + 3$  ضریبها متناسب است  $x^2 - 4x^2 - x + 3 = -3$  (۴)  
 $x^2 - 4x - 3 = (x-3)(x+1)$   
 $f(x) = (x-1)(x+1)(x-3)$   
 $p < 0: (a, b) = (1, 3)$   $x > 0$   
این عدد  $x$  است  $2 = 2 \Rightarrow -3$  (۳)  
 $f(x) = 1 - 12 - 2 + 3 = -10$  (۳)



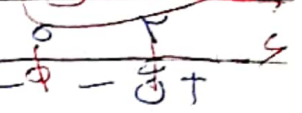
بناهای و مقادیر مثبتی  $\Rightarrow$    $\Rightarrow$   $\left. \begin{matrix} \textcircled{1} a < 0 \\ \textcircled{2} a < 0 \end{matrix} \right\} \Rightarrow$

$\textcircled{1} a - 1 < 0 \Rightarrow a < 1$

$\textcircled{2} (a-1)^2 - 4(a-1) < 0 \Rightarrow a^2 - 5a + 4 < 0$

$\xrightarrow{\text{مضرب}}$    $\Rightarrow a = (-1, 4) \cap (-\infty, 1) \cap (a, \infty)$

$\left. \begin{matrix} \textcircled{1} a < 0 \\ \textcircled{2} a < 0 \end{matrix} \right\} \Rightarrow$

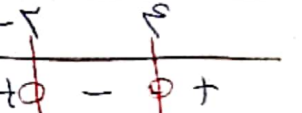
$m(m^2 + m) > 0 \Rightarrow \frac{m^2(m^2 + 1)}{m - 2} > 0$  

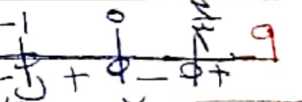
$m = (2, +\infty)$

$(x^2 - x - 2) \leq (x + 2)^2 \Rightarrow \frac{(x-2)(x+2)(x-1)^2}{(x^2+x+1)(x-2)^2} \leq 0$

$x = [-2, 2) \cup [2, +\infty)$

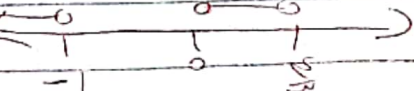
$\frac{x^2 - 2x}{x^2 + 2} < 2 \Rightarrow \frac{x^2 - 2x - 2x - 2}{x^2 + 2} < 0$

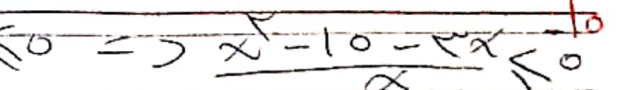
$\Rightarrow \frac{x^2 - 4x - 2}{x^2 + 2} < 0 \Rightarrow (x-2)(x+2) < 0$    
 $(a, b) = (-2, 2)$   $b - a = 4 - (-2) = 6$

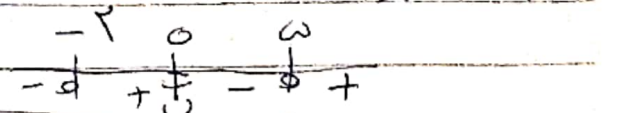
$1 < \frac{x^2 - 2x}{x^2 + 2} < 0 \Rightarrow \textcircled{1} x(x-2) < 0$  

$x = (0, 2) \cup (0, \frac{2}{x}) \Rightarrow \frac{x^2 - 2x + 1}{x + 1} > 0 \Rightarrow \frac{x^2 - 2x + 1}{x + 1} > 0$

$\textcircled{1}, 2 = 1 \cap 2 \Rightarrow (-\infty, -1) \cup (0, \frac{2}{x}) \cap (-1, +\infty)$

$x = (0, \frac{2}{x})$  

$\frac{x^2 - 10}{x} \leq 2 \Rightarrow \frac{x^2 - 10 - 2x}{x} \leq 0$  

$\Rightarrow \frac{(x-5)(x+2)}{x} \leq 0$  

$x \in (-\infty, -2] \cup (0, 5]$