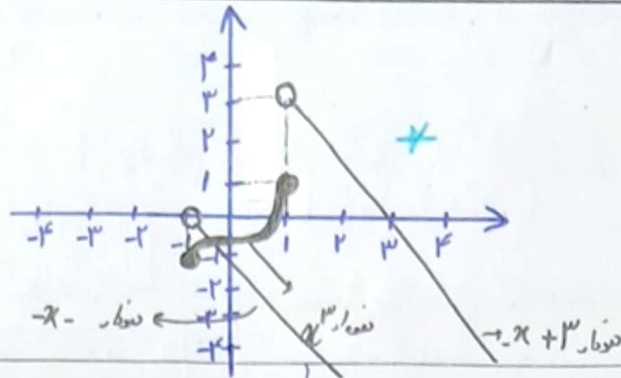
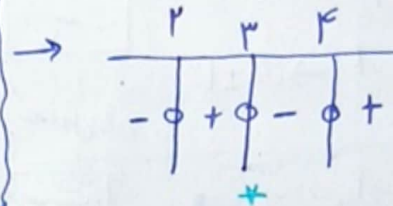
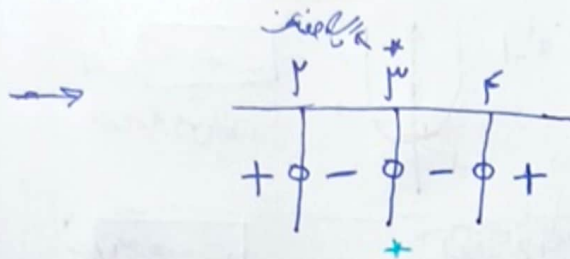




$$y = (x-2)(x-3)^2(x-4)$$

(ب)

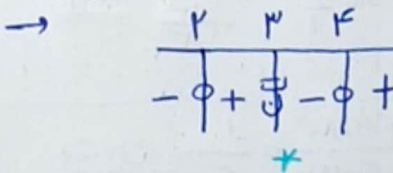
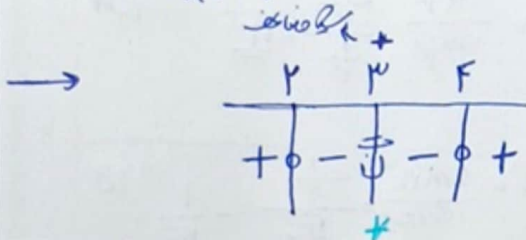
$$y = (x-2)(x-3)(x-4) \quad \text{الف}$$



$$y = \frac{(x-2)(x-4)}{(x-3)(x-3)}$$

(ب)

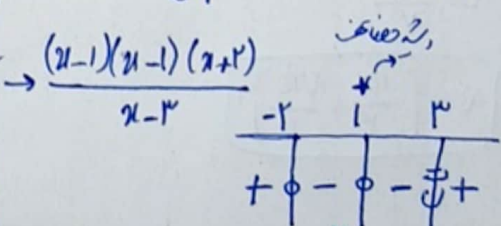
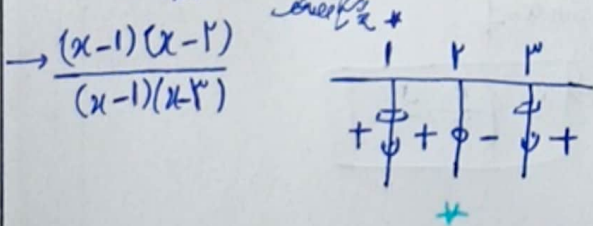
$$y = \frac{(x-2)(x-4)}{x-3} \quad \text{الف}$$



$$y = \frac{x^2-3x+2}{x^2-4x+3}$$

(ب)

$$y = \frac{x^2-3x+2}{x-3} \rightarrow (x-1)(x-2)(x+2)$$



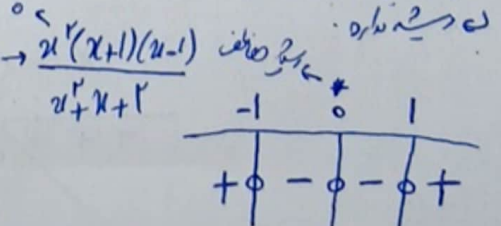
$$y = \frac{x^2+3x+2}{x^2+2x+3} \rightarrow \text{①}$$

(ب)

$$y = \frac{x^2-x^2}{x^2+x+2} \rightarrow \Delta = 1-4 = -3 \Rightarrow \Delta < 0$$

$$\text{① } \Delta = 9-14 = -5 \Rightarrow \Delta < 0 \rightarrow \text{دو نقطه ندارد}$$

$$\text{② } \Delta = 4-12 = -8 \Rightarrow \Delta < 0 \rightarrow \text{دو نقطه ندارد}$$



دو نقطه ندارد، پس صورت و مخرج در هر دو نقطه مثبت است