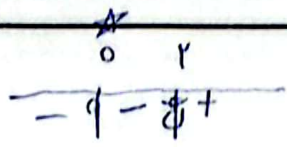




$$\frac{m(m^r+m)}{m-r} > 0$$

$$Z.I = (r, \infty)$$

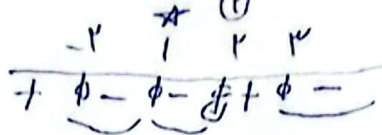


6

$$\frac{(x^r - x - 4)(x-1)^r}{(x^r + x + 1)(r-x)^r} \leq 0$$

$$Z.I = [-r, r] \cup [r, \infty)$$

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



7

$$\frac{r^2 x^r - r x}{x^r + r} < r$$

$$\frac{x^r - r x - 1}{x^r + r} < 0$$

$$Z.I = (-r, r)$$

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

$$\frac{(x-r)(x+r)}{x^r + r} < 0$$

$$b-a = r+r = 4$$

$$\frac{r^2 x^r - r x - r x^r - 1}{x^r + r} < 0$$



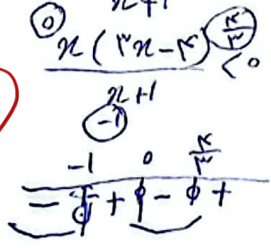
8

$$-1 < \frac{r^2 x^r - r x}{x+1} < 0$$

$$Z.I = (0, \frac{r}{r})$$

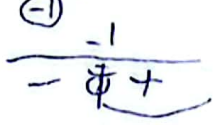


$$\frac{r^2 x^r - r x}{x+1} < 0$$



$$\frac{r^2 x^r - r x + x + 1}{x+1} > 0$$

$$\frac{r^2 x^r - r x + 1}{x+1} > 0$$



9

$$\frac{x^r - 10}{x} \leq r$$

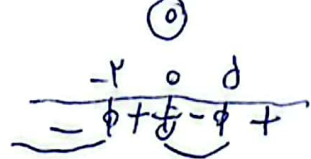


$$Z.I = (-\infty, -r] \cup (0, d]$$

$$\frac{x^r - 10}{x} - r \leq 0$$

$$\frac{x^r - 10 - r x}{x} \leq 0$$

$$\frac{(x-d)(x+r)}{x} \leq 0$$



10