

تجزیه بر اساس توان

$$a^r + r a b + b^r = 0 \rightarrow (a+b)^r = 0 \rightarrow a+b=0$$

$$a = -b$$

$$d^2 | x^r + r x + 1 = 0 \rightarrow (x+1)^r = 0 \rightarrow x+1=0$$

$$x = -1$$

$$x^r + m x + c = 0 \rightarrow \left( x + \frac{m}{r} \right)^r - \frac{m}{r} + c = 0$$

$$\left( x + \frac{m}{r} \right)^r - \frac{m}{r} + c = 0 \rightarrow \left( x + \frac{m}{r} \right)^r = \frac{m}{r} - c$$

$$x^r + d x + r = 0 \rightarrow \left( x + \frac{d}{r} \right)^r - \frac{d}{r} + r = 0$$

$m = d$

$\frac{m}{r} = \frac{d}{r}$

$$\left( x + \frac{d}{r} \right)^r - \frac{d}{r} + r = 0 \rightarrow \left( x + \frac{d}{r} \right)^r = \frac{d}{r} - r$$

$$\left( x + \frac{d}{r} \right) = \sqrt[r]{\frac{d}{r} - r} \quad \text{و} \quad x + \frac{d}{r} = -\sqrt[r]{\frac{d}{r} - r}$$

$$m x^r + b x + c = 0 \rightarrow m \left( x^r + \frac{b}{m} x + \frac{c}{m} \right) = 0$$

$$x^r + \frac{b}{m} x + \frac{c}{m} = 0$$

$$x^r + r x + 1 = 0 \rightarrow x^r + r x + \frac{1}{r} = 0$$