```
> p := x→x·(x − 1) − a
```

$$p := x \mapsto x \cdot (x - 1) - a \quad (1)$$

```
> # i
> p_i := subs(a = 0, p(x))
```

$$p\_i := x\,(x - 1) \quad (2)$$

```
> solve(p_i = 0)
```

$$0,\ 1 \quad (3)$$

```
> # Dus lambda = 0, en lambda = 1
> # Benader naar x = 0
> x_0 := 0 + u·a + v·a^2
```

$$x\_0 := v\,a^2 + u\,a \quad (4)$$

```
> p_subs_0 := subs(x = x_0, p(x))
```

$$p\_subs\_0 := (v\,a^2 + u\,a)\,(v\,a^2 + u\,a - 1) - a \quad (5)$$

```
> p_expand_0 := expand(p_subs_0)
```

$$p\_expand\_0 := a^4\,v^2 + 2\,a^3\,u\,v + a^2\,u^2 - v\,a^2 - u\,a - a \quad (6)$$

```
> coeff_1_0 := coeff(p_expand_0, a, 1)
```

$$coeff\_1\_0 := -u - 1 \quad (7)$$

```
> coeff_2_0 := coeff(p_expand_0, a, 2)
```

$$coeff\_2\_0 := u^2 - v \quad (8)$$

```
> solve_0 := solve({coeff_1_0 = 0, coeff_2_0 = 0}, {u, v})
```

$$solve\_0 := \{u = -1,\ v = 1\} \quad (9)$$

```
> result_0 := subs(u = rhs(solve_0[1]), v = rhs(solve_0[2]), x_0)
```

$$result\_0 := a^2 - a \quad (10)$$

```
>
> # Benader 1
> x_1 := 1 + u·a + v·a^2
```

$$x\_1 := v\,a^2 + u\,a + 1 \quad (11)$$

```
> p_subs_1 := subs(x = x_1, p(x))
```

$$p\_subs\_1 := (v\,a^2 + u\,a + 1)\,(v\,a^2 + u\,a) - a \quad (12)$$

```
> p_expand_1 := expand(p_subs_1)
```

$$p\_expand\_1 := a^4\,v^2 + 2\,a^3\,u\,v + a^2\,u^2 + v\,a^2 + u\,a - a \quad (13)$$

```
> coeff_1_1 := coeff(p_expand_1, a, 1)
```

$$coeff\_1\_1 := u - 1 \quad (14)$$

```
> coeff_1_2 := coeff(p_expand_1, a, 2)
```

$$coeff\_1\_2 := u^2 + v \quad (15)$$

```
> solve_1 := solve({coeff_1_1 = 0, coeff_1_2 = 0}, {u, v})
```

$$solve\_1 := \{u = 1,\ v = -1\} \quad (16)$$

```
> result_1 := subs(u = rhs(solve_1[1]), v = rhs(solve_1[2]), x_1)
```

$$result\_1 := -a^2 + a + 1 \quad (17)$$

>