

```

> restart;
> n:=3;

```

$$n := 3$$

(1)

```

> x:=2;

```

$$x := 2$$

(2)

```

> c:=Vector(n+1):
> d:=Vector(n+1):
> for i from 0 to n do
  Sc:=0;
  Sd:=0;
  for j from 0 to n do
    Lambda:=(-1)^(i+j)*sum(binomial(k,i)*abs(Stirling1(k,j))/k!,
    k=max(i,j)..n);
    Sc:=Sc+Lambda*x^j;
    if j > 0 then
      Sd:=Sd+j*Lambda*x^(j-1);
    fi;
  od:
  c[i+1]:=Sc;
  d[i+1]:=Sd;
> od:
> c;

```

$$\begin{bmatrix} 0 \\ 0 \\ 1 \\ 0 \end{bmatrix}$$

(3)

```

> d;

```

$$\begin{bmatrix} \frac{1}{6} \\ -1 \\ \frac{1}{2} \\ \frac{1}{3} \end{bmatrix}$$

(4)