

In [1]:

```
numerator(x)=1-x+2*x^2-x^3
denominator(x)=x*(x^2+1)^2
g(x)=numerator(x)/denominator(x)
show(g)
```

Out[1]:

$$x \mapsto -\frac{x^3 - 2x^2 + x - 1}{(x^2 + 1)^2 x}$$

In [2]:

```
show(g.partial_fraction())
```

Out[2]:

$$x \mapsto -\frac{x+1}{x^2+1} + \frac{1}{x} + \frac{x}{(x^2+1)^2}$$

In [0]: