In[9]:=
```
f[v] = 1 / (v - 3) ^2 + 1 / (1 + v) ^2 + 1 / (2 + v) ^2
NSolve[f[v] == 1, v, 5]
```
数值求解

Out[9]=
$$\frac{1}{(-3+v)^2}+\frac{1}{(1+v)^2}+\frac{1}{(2+v)^2}$$

Out[10]=
$$\{\{v\to 4.035\},\{v\to -3.1494\},\{v\to 1.8919\},\{v\to -1.5007+0.4089\,i\},\{v\to -1.5007-0.4089\,i\},\{v\to 0.22351\}\}$$

In[19]:=
```
v = 0.2235090690295110979`4.522878745280338
```

Out[19]=
$$0.22351$$

In[20]:=
$$\frac{-3}{(-3+v)^2}+\frac{1}{(1+v)^2}+\frac{2}{(2+v)^2}-2\left(\frac{1}{(-3+v)}+\frac{1}{(1+v)}+\frac{1}{(2+v)}\right)$$

Out[20]=
$$-1.1304$$