

Pensieve header: A progress monitor for JCF computations.

```
Dynamic[StringForm["`1` `5` `2` . `3` . `4`",
  Sequence @@ (MatrixForm /@ {NN, PP, MM, QQ}),
  If[Expand[NN] === Expand[PP.MM.QQ], "=", "#"]
]]
```

$$\begin{pmatrix} -1+x & 0 & 0 & 0 \\ 0 & -2+x & 0 & 0 \\ 0 & 0 & -2+x & 0 \\ 0 & 0 & 1 & -2+x \end{pmatrix} = \begin{pmatrix} \frac{1}{4}(-21+26x-7x^2) & 20-47x+33x^2-7x^3 & 0 & 1 \\ -6+\frac{9x}{2} & 2(7-21x+9x^2) & 1 & 0 \\ \frac{1}{4}(22-26x+7x^2) & -13+44x-33x^2+7x^3 & 0 & -1 \\ 0 & -4 & 0 & 0 \end{pmatrix}$$

$$\cdot \begin{pmatrix} -1+x & 2 & 0 & 2 \\ -\frac{1}{4} & -\frac{5}{2}+x & 0 & -\frac{3}{2} \\ -\frac{5}{2} & -5 & -2+x & -3 \\ -\frac{1}{4} & -\frac{1}{2} & 0 & -\frac{3}{2}+x \end{pmatrix} \cdot \begin{pmatrix} -14(-1+x) & 0 & 1 & 52-55x+14x^2 \\ -11+\frac{21x}{2} & 0 & 0 & \frac{1}{2}(-84+85x-21x^2) \\ -2+3x & 1 & 0 & -(-3+x)(-2+3x) \\ 16-\frac{45x}{2}+7x^2 & 0 & 0 & 61-\frac{179x}{2}+\frac{87x^2}{2}-7x^3 \end{pmatrix}$$