$(n^2-n+2)\cdot a(n)-(n+2)\cdot(n+1)\cdot a(n+2)+3\cdot(n+1)\cdot a(n+1)=0 \mid a(n+2)=w$ $\quad -(n+1)\cdot(n+2)\cdot w+3\cdot a(n+1)\cdot(n+1)+a(n)\cdot(n^2-n+2)=0$

$\text{solve}(-(n+1)\cdot(n+2)\cdot w+3\cdot a(n+1)\cdot(n+1)+a(n)\cdot(n^2-n+2)=0, w)$ $\quad w=\frac{3\cdot a(n+1)\cdot(n+1)+a(n)\cdot(n^2-n+2)}{(n+1)\cdot(n+2)}$

$a(n+2)=\frac{3\cdot a(n+1)\cdot(n+1)+a(n)\cdot(n^2-n+2)}{(n+1)\cdot(n+2)}$ $\quad a(n+2)=\frac{3\cdot a(n+1)\cdot(n+1)+a(n)\cdot(n^2-n+2)}{(n+1)\cdot(n+2)}$

$a(n+2)=\frac{3\cdot a(n+1)\cdot(n+1)+a(n)\cdot(n^2-n+2)}{(n+1)\cdot(n+2)} \mid n=m-2$ $\quad a(m)=\frac{3\cdot a(m-1)\cdot(m-1)+a(m-2)\cdot(m^2-5\cdot m+8)}{m\cdot(m-1)}$

$a(m)=\frac{3\cdot a(m-1)\cdot(m-1)+a(m-2)\cdot(m^2-5\cdot m+8)}{m\cdot(m-1)} \mid m=n$ $\quad a(n)=\frac{3\cdot a(n-1)\cdot(n-1)+a(n-2)\cdot(n^2-5\cdot n+8)}{n\cdot(n-1)}$

©seqGen(la récursion a(n), l'indice n, le nom de la variable a, {n de départ, n final},{a(0),a(1)}, l'incrément de n)

$\text{seqGen}\left(\frac{3\cdot a(n-1)\cdot(n-1)+a(n-2)\cdot(n^2-5\cdot n+8)}{n\cdot(n-1)}, n, a, \{0,10\}, \{3,-2\}, 1\right)$ $\quad \left\{3,-2,0,\frac{-2}{3},\frac{-1}{2},\frac{-17}{30},\frac{-31}{60},\frac{-653}{1260},\frac{-47}{96},\frac{-43537}{90720},\frac{-138947}{302400}\right\}$

$c:=\text{seqGen}\left(\frac{3\cdot a(n-1)\cdot(n-1)+a(n-2)\cdot(n^2-5\cdot n+8)}{n\cdot(n-1)}, n, a, \{0,10\}, \{3,-2\}, 1\right)$ $\quad \left\{3,-2,0,\frac{-2}{3},\frac{-1}{2},\frac{-17}{30},\frac{-31}{60},\frac{-653}{1260},\frac{-47}{96},\frac{-43537}{90720},\frac{-138947}{302400}\right\}$

$c[1]$ $\quad 3$

$\sum_{n=0}^{6}\left(c[n+1]\cdot x^n\right)$ $\quad \frac{-31\cdot x^6}{60}-\frac{17\cdot x^5}{30}-\frac{x^4}{2}-\frac{2\cdot x^3}{3}-2\cdot x+3$

$sol(x):=\frac{-31\cdot x^6}{60}-\frac{17\cdot x^5}{30}-\frac{x^4}{2}-\frac{2\cdot x^3}{3}-2\cdot x+3$ $\quad \textit{Terminé}$

$sol(0.5)$ $\quad 1.85964$

$$c:=\text{seqGen}\left(\frac{3\cdot a(n-1)\cdot(n-1)+a(n-2)\cdot\left(n^2-5\cdot n+8\right)}{n\cdot(n-1)},n,a,\{0,50\},\{3,-2\},1\right)$$

$$\left\{3,-2,0,\frac{-2}{3},\frac{-1}{2},\frac{-17}{30},\frac{-31}{60},\frac{-653}{1260},\frac{-47}{96},\frac{-43537}{90720},\frac{-138947}{302400},\frac{-4472261}{9979200},\frac{-54779}{126720},\frac{-93741671}{222393600},\frac{-60579863}{148262400},\frac{-18627715387}{46702656000},\frac{-10739397659}{27675648000},\frac{-438087897493}{1154829312000},\frac{-1025795453}{2771590348}\right.\rightarrow$$

Terminé

$$solu6(x):=\sum_{n=0}^{6}\left(c[n+1]\cdot x^n\right)$$

Terminé

$$solu15(x):=\sum_{n=0}^{15}\left(c[n+1]\cdot x^n\right)$$

Terminé

$$solu30(x):=\sum_{n=0}^{30}\left(c[n+1]\cdot x^n\right)$$

$solu6(0.5)$ 1.85964

$solu15(0.5)$ 1.85188

$solu30(0.5)$ 1.85186

$solu15(x)$

$$\frac{-18627715387\cdot x^{15}}{46702656000}-\frac{60579863\cdot x^{14}}{148262400}-\frac{93741671\cdot x^{13}}{222393600}-\frac{54779\cdot x^{12}}{126720}-\frac{4472261\cdot x^{11}}{9979200}-\frac{138947\cdot x^{10}}{302400}-\frac{43537\cdot x^9}{90720}-\frac{47\cdot x^8}{96}-\frac{653\cdot x^7}{1260}-\frac{31\cdot x^6}{60}-\frac{17\cdot x^5}{30}-\frac{x^4}{2}-\frac{2\cdot x^3}{3}-\rightarrow$$