

Pensieve header: \$p_2\$ data from Andrea Overbay, February 9, 2019.

In[*]:= **SetDirectory**["C:\drorbn\AcademicPensieve\People\Overbay"]

Out[*]:= C:\drorbn\AcademicPensieve\People\Overbay

In[*]:= **three1** = $1 - \frac{1}{t^4} + \frac{1}{t^2} + t^2 - t^4$

Out[*]:= $1 - \frac{1}{t^4} + \frac{1}{t^2} + t^2 - t^4$

In[*]:= **four1** = $5 + \frac{1}{t^4} - \frac{4}{t^2} - 4t^2 + t^4$

Out[*]:= $5 + \frac{1}{t^4} - \frac{4}{t^2} - 4t^2 + t^4$

In[*]:= **five1** = $61 + \frac{1}{t^{16}} - \frac{4}{t^{14}} + \frac{8}{t^{12}} - \frac{12}{t^{10}} + \frac{13}{t^8} - \frac{18}{t^6} + \frac{32}{t^4} - \frac{49}{t^2} - 49t^2 + 32t^4 - 18t^6 + 13t^8 - 12t^{10} + 8t^{12} - 4t^{14} + t^{16}$

Out[*]:= $61 + \frac{1}{t^{16}} - \frac{4}{t^{14}} + \frac{8}{t^{12}} - \frac{12}{t^{10}} + \frac{13}{t^8} - \frac{18}{t^6} + \frac{32}{t^4} - \frac{49}{t^2} - 49t^2 + 32t^4 - 18t^6 + 13t^8 - 12t^{10} + 8t^{12} - 4t^{14} + t^{16}$

In[*]:= **five2** = $80 + \frac{3}{t^8} - \frac{14}{t^6} + \frac{31}{t^4} - \frac{59}{t^2} - 59t^2 + 31t^4 - 14t^6 + 3t^8$

Out[*]:= $80 + \frac{3}{t^8} - \frac{14}{t^6} + \frac{31}{t^4} - \frac{59}{t^2} - 59t^2 + 31t^4 - 14t^6 + 3t^8$

In[*]:= **six1** = $-70 - \frac{1}{t^8} + \frac{10}{t^6} - \frac{32}{t^4} + \frac{57}{t^2} + 57t^2 - 32t^4 + 10t^6 - t^8$

Out[*]:= $-70 - \frac{1}{t^8} + \frac{10}{t^6} - \frac{32}{t^4} + \frac{57}{t^2} + 57t^2 - 32t^4 + 10t^6 - t^8$

In[*]:= **six2** = $87 - \frac{1}{t^{12}} + \frac{14}{t^{10}} - \frac{63}{t^8} + \frac{135}{t^6} - \frac{131}{t^4} + \frac{2}{t^2} + 2t^2 - 131t^4 + 135t^6 - 63t^8 + 14t^{10} - t^{12}$

Out[*]:= $87 - \frac{1}{t^{12}} + \frac{14}{t^{10}} - \frac{63}{t^8} + \frac{135}{t^6} - \frac{131}{t^4} + \frac{2}{t^2} + 2t^2 - 131t^4 + 135t^6 - 63t^8 + 14t^{10} - t^{12}$

In[*]:= **six3** = $405 - \frac{1}{t^{12}} + \frac{4}{t^{10}} + \frac{2}{t^8} - \frac{52}{t^6} + \frac{177}{t^4} - \frac{332}{t^2} - 332t^2 + 177t^4 - 52t^6 + 2t^8 + 4t^{10} - t^{12}$

Out[*]:= $405 - \frac{1}{t^{12}} + \frac{4}{t^{10}} + \frac{2}{t^8} - \frac{52}{t^6} + \frac{177}{t^4} - \frac{332}{t^2} - 332t^2 + 177t^4 - 52t^6 + 2t^8 + 4t^{10} - t^{12}$

In[*]:= **seven1** = $438 + \frac{3}{t^{24}} - \frac{12}{t^{22}} + \frac{27}{t^{20}} - \frac{48}{t^{18}} + \frac{72}{t^{16}} - \frac{96}{t^{14}} + \frac{114}{t^{12}} - \frac{141}{t^{10}} + \frac{189}{t^8} - \frac{255}{t^6} + \frac{333}{t^4} - \frac{402}{t^2} - 402t^2 + 333t^4 - 255t^6 + 189t^8 - 141t^{10} + 114t^{12} - 96t^{14} + 72t^{16} - 48t^{18} + 27t^{20} - 12t^{22} + 3t^{24}$

Out[*]:= $438 + \frac{3}{t^{24}} - \frac{12}{t^{22}} + \frac{27}{t^{20}} - \frac{48}{t^{18}} + \frac{72}{t^{16}} - \frac{96}{t^{14}} + \frac{114}{t^{12}} - \frac{141}{t^{10}} + \frac{189}{t^8} - \frac{255}{t^6} + \frac{333}{t^4} - \frac{402}{t^2} - 402t^2 + 333t^4 - 255t^6 + 189t^8 - 141t^{10} + 114t^{12} - 96t^{14} + 72t^{16} - 48t^{18} + 27t^{20} - 12t^{22} + 3t^{24}$

$$\text{In[*]:= seven2} = 1593 + \frac{42}{t^8} - \frac{248}{t^6} + \frac{705}{t^4} - \frac{1294}{t^2} - 1294 t^2 + 705 t^4 - 248 t^6 + 42 t^8$$

$$\text{Out[*]:= } 1593 + \frac{42}{t^8} - \frac{248}{t^6} + \frac{705}{t^4} - \frac{1294}{t^2} - 1294 t^2 + 705 t^4 - 248 t^6 + 42 t^8$$

$$\text{In[*]:= seven3} = 3849 + \frac{23}{t^{16}} - \frac{130}{t^{14}} + \frac{372}{t^{12}} - \frac{740}{t^{10}} + \frac{1193}{t^8} - \frac{1793}{t^6} + \frac{2615}{t^4} -$$

$$\frac{3462}{t^2} - 3462 t^2 + 2615 t^4 - 1793 t^6 + 1193 t^8 - 740 t^{10} + 372 t^{12} - 130 t^{14} + 23 t^{16}$$

$$\text{Out[*]:= } 3849 + \frac{23}{t^{16}} - \frac{130}{t^{14}} + \frac{372}{t^{12}} - \frac{740}{t^{10}} + \frac{1193}{t^8} - \frac{1793}{t^6} + \frac{2615}{t^4} - \frac{3462}{t^2} -$$

$$3462 t^2 + 2615 t^4 - 1793 t^6 + 1193 t^8 - 740 t^{10} + 372 t^{12} - 130 t^{14} + 23 t^{16}$$

$$\text{In[*]:= seven4} = 4994 + \frac{112}{t^8} - \frac{720}{t^6} + \frac{2177}{t^4} - \frac{4064}{t^2} - 4064 t^2 + 2177 t^4 - 720 t^6 + 112 t^8$$

$$\text{Out[*]:= } 4994 + \frac{112}{t^8} - \frac{720}{t^6} + \frac{2177}{t^4} - \frac{4064}{t^2} - 4064 t^2 + 2177 t^4 - 720 t^6 + 112 t^8$$

$$\text{In[*]:= seven5} = 12090 + \frac{23}{t^{16}} - \frac{168}{t^{14}} + \frac{632}{t^{12}} - \frac{1652}{t^{10}} + \frac{3389}{t^8} - \frac{5847}{t^6} + \frac{8697}{t^4} -$$

$$\frac{11117}{t^2} - 11117 t^2 + 8697 t^4 - 5847 t^6 + 3389 t^8 - 1652 t^{10} + 632 t^{12} - 168 t^{14} + 23 t^{16}$$

$$\text{Out[*]:= } 12090 + \frac{23}{t^{16}} - \frac{168}{t^{14}} + \frac{632}{t^{12}} - \frac{1652}{t^{10}} + \frac{3389}{t^8} - \frac{5847}{t^6} + \frac{8697}{t^4} - \frac{11117}{t^2} -$$

$$11117 t^2 + 8697 t^4 - 5847 t^6 + 3389 t^8 - 1652 t^{10} + 632 t^{12} - 168 t^{14} + 23 t^{16}$$

$$\text{In[*]:= seven6} = 499 + \frac{8}{t^{10}} - \frac{60}{t^8} + \frac{155}{t^6} - \frac{99}{t^4} - \frac{253}{t^2} - 253 t^2 - 99 t^4 + 155 t^6 - 60 t^8 + 8 t^{10}$$

$$\text{Out[*]:= } 499 + \frac{8}{t^{10}} - \frac{60}{t^8} + \frac{155}{t^6} - \frac{99}{t^4} - \frac{253}{t^2} - 253 t^2 - 99 t^4 + 155 t^6 - 60 t^8 + 8 t^{10}$$

$$\text{In[*]:= seven7} = 929 - \frac{1}{t^{12}} + \frac{12}{t^{10}} - \frac{46}{t^8} + \frac{36}{t^6} + \frac{207}{t^4} - \frac{673}{t^2} - 673 t^2 + 207 t^4 + 36 t^6 - 46 t^8 + 12 t^{10} - t^{12}$$

$$\text{Out[*]:= } 929 - \frac{1}{t^{12}} + \frac{12}{t^{10}} - \frac{46}{t^8} + \frac{36}{t^6} + \frac{207}{t^4} - \frac{673}{t^2} - 673 t^2 + 207 t^4 + 36 t^6 - 46 t^8 + 12 t^{10} - t^{12}$$

$$\text{In[*]:= eight1} = 117 - \frac{3}{t^8} + \frac{20}{t^6} - \frac{14}{t^4} - \frac{63}{t^2} - 63 t^2 - 14 t^4 + 20 t^6 - 3 t^8$$

$$\text{Out[*]:= } 117 - \frac{3}{t^8} + \frac{20}{t^6} - \frac{14}{t^4} - \frac{63}{t^2} - 63 t^2 - 14 t^4 + 20 t^6 - 3 t^8$$

$$\text{In[*]:= eight2} = 5698 + \frac{1}{t^{24}} - \frac{12}{t^{22}} + \frac{63}{t^{20}} - \frac{194}{t^{18}} + \frac{407}{t^{16}} - \frac{628}{t^{14}} + \frac{738}{t^{12}} - \frac{742}{t^{10}} + \frac{962}{t^8} - \frac{1826}{t^6} + \frac{3361}{t^4} - \frac{4979}{t^2} - 4979 t^2 +$$

$$3361 t^4 - 1826 t^6 + 962 t^8 - 742 t^{10} + 738 t^{12} - 628 t^{14} + 407 t^{16} - 194 t^{18} + 63 t^{20} - 12 t^{22} + t^{24}$$

$$\text{Out[*]:= } 5698 + \frac{1}{t^{24}} - \frac{12}{t^{22}} + \frac{63}{t^{20}} - \frac{194}{t^{18}} + \frac{407}{t^{16}} - \frac{628}{t^{14}} + \frac{738}{t^{12}} - \frac{742}{t^{10}} + \frac{962}{t^8} - \frac{1826}{t^6} + \frac{3361}{t^4} - \frac{4979}{t^2} - 4979 t^2 +$$

$$3361 t^4 - 1826 t^6 + 962 t^8 - 742 t^{10} + 738 t^{12} - 628 t^{14} + 407 t^{16} - 194 t^{18} + 63 t^{20} - 12 t^{22} + t^{24}$$

$$\text{In[*]:= eight3} = -2422 - \frac{16}{t^8} + \frac{176}{t^6} - \frac{795}{t^4} + \frac{1848}{t^2} + 1848 t^2 - 795 t^4 + 176 t^6 - 16 t^8$$

$$\text{Out[*]:=} -2422 - \frac{16}{t^8} + \frac{176}{t^6} - \frac{795}{t^4} + \frac{1848}{t^2} + 1848 t^2 - 795 t^4 + 176 t^6 - 16 t^8$$

$$\text{In[*]:= eight4} = 1773 - \frac{1}{t^{16}} + \frac{10}{t^{14}} - \frac{60}{t^{12}} + \frac{268}{t^{10}} - \frac{761}{t^8} + \frac{1205}{t^6} -$$

$$\frac{697}{t^4} - \frac{852}{t^2} - 852 t^2 - 697 t^4 + 1205 t^6 - 761 t^8 + 268 t^{10} - 60 t^{12} + 10 t^{14} - t^{16}$$

$$\text{Out[*]:=} 1773 - \frac{1}{t^{16}} + \frac{10}{t^{14}} - \frac{60}{t^{12}} + \frac{268}{t^{10}} - \frac{761}{t^8} + \frac{1205}{t^6} - \frac{697}{t^4} -$$

$$\frac{852}{t^2} - 852 t^2 - 697 t^4 + 1205 t^6 - 761 t^8 + 268 t^{10} - 60 t^{12} + 10 t^{14} - t^{16}$$

$$\text{In[*]:= eight5} = 10965 + \frac{1}{t^{24}} - \frac{12}{t^{22}} + \frac{65}{t^{20}} - \frac{214}{t^{18}} + \frac{501}{t^{16}} - \frac{927}{t^{14}} +$$

$$\frac{1492}{t^{12}} - \frac{2298}{t^{10}} + \frac{3596}{t^8} - \frac{5579}{t^6} + \frac{8009}{t^4} - \frac{10117}{t^2} - 10117 t^2 + 8009 t^4 - 5579 t^6 +$$

$$3596 t^8 - 2298 t^{10} + 1492 t^{12} - 927 t^{14} + 501 t^{16} - 214 t^{18} + 65 t^{20} - 12 t^{22} + t^{24}$$

$$\text{Out[*]:=} 10965 + \frac{1}{t^{24}} - \frac{12}{t^{22}} + \frac{65}{t^{20}} - \frac{214}{t^{18}} + \frac{501}{t^{16}} - \frac{927}{t^{14}} + \frac{1492}{t^{12}} - \frac{2298}{t^{10}} + \frac{3596}{t^8} - \frac{5579}{t^6} + \frac{8009}{t^4} - \frac{10117}{t^2} - 10117 t^2 +$$

$$8009 t^4 - 5579 t^6 + 3596 t^8 - 2298 t^{10} + 1492 t^{12} - 927 t^{14} + 501 t^{16} - 214 t^{18} + 65 t^{20} - 12 t^{22} + t^{24}$$

$$\text{In[*]:= eight6} = 6782 + \frac{3}{t^{16}} - \frac{36}{t^{14}} + \frac{182}{t^{12}} - \frac{498}{t^{10}} + \frac{915}{t^8} - \frac{1593}{t^6} + \frac{3179}{t^4} -$$

$$\frac{5544}{t^2} - 5544 t^2 + 3179 t^4 - 1593 t^6 + 915 t^8 - 498 t^{10} + 182 t^{12} - 36 t^{14} + 3 t^{16}$$

$$\text{Out[*]:=} 6782 + \frac{3}{t^{16}} - \frac{36}{t^{14}} + \frac{182}{t^{12}} - \frac{498}{t^{10}} + \frac{915}{t^8} - \frac{1593}{t^6} + \frac{3179}{t^4} - \frac{5544}{t^2} -$$

$$5544 t^2 + 3179 t^4 - 1593 t^6 + 915 t^8 - 498 t^{10} + 182 t^{12} - 36 t^{14} + 3 t^{16}$$

$$\text{In[*]:= eight7} = 3280 - \frac{1}{t^{20}} + \frac{10}{t^{18}} - \frac{58}{t^{16}} + \frac{238}{t^{14}} - \frac{692}{t^{12}} + \frac{1401}{t^{10}} - \frac{1908}{t^8} + \frac{1464}{t^6} + \frac{226}{t^4} - \frac{2319}{t^2} -$$

$$2319 t^2 + 226 t^4 + 1464 t^6 - 1908 t^8 + 1401 t^{10} - 692 t^{12} + 238 t^{14} - 58 t^{16} + 10 t^{18} - t^{20}$$

$$\text{Out[*]:=} 3280 - \frac{1}{t^{20}} + \frac{10}{t^{18}} - \frac{58}{t^{16}} + \frac{238}{t^{14}} - \frac{692}{t^{12}} + \frac{1401}{t^{10}} - \frac{1908}{t^8} + \frac{1464}{t^6} + \frac{226}{t^4} - \frac{2319}{t^2} -$$

$$2319 t^2 + 226 t^4 + 1464 t^6 - 1908 t^8 + 1401 t^{10} - 692 t^{12} + 238 t^{14} - 58 t^{16} + 10 t^{18} - t^{20}$$

$$\text{In[*]:= eight8} = 114 - \frac{1}{t^{16}} + \frac{12}{t^{14}} - \frac{82}{t^{12}} + \frac{326}{t^{10}} - \frac{790}{t^8} + \frac{1179}{t^6} - \frac{996}{t^4} +$$

$$\frac{296}{t^2} + 296 t^2 - 996 t^4 + 1179 t^6 - 790 t^8 + 326 t^{10} - 82 t^{12} + 12 t^{14} - t^{16}$$

$$\text{Out[*]:=} 114 - \frac{1}{t^{16}} + \frac{12}{t^{14}} - \frac{82}{t^{12}} + \frac{326}{t^{10}} - \frac{790}{t^8} + \frac{1179}{t^6} - \frac{996}{t^4} +$$

$$\frac{296}{t^2} + 296 t^2 - 996 t^4 + 1179 t^6 - 790 t^8 + 326 t^{10} - 82 t^{12} + 12 t^{14} - t^{16}$$

$$\text{In[*]:= eight9} = 7338 - \frac{1}{t^{20}} + \frac{12}{t^{18}} - \frac{58}{t^{16}} + \frac{156}{t^{14}} - \frac{236}{t^{12}} + \frac{60}{t^{10}} + \frac{735}{t^8} - \frac{2372}{t^6} + \frac{4578}{t^4} - \frac{6544}{t^2} -$$

$$6544 t^2 + 4578 t^4 - 2372 t^6 + 735 t^8 + 60 t^{10} - 236 t^{12} + 156 t^{14} - 58 t^{16} + 12 t^{18} - t^{20}$$

$$\text{Out[*]:= } 7338 - \frac{1}{t^{20}} + \frac{12}{t^{18}} - \frac{58}{t^{16}} + \frac{156}{t^{14}} - \frac{236}{t^{12}} + \frac{60}{t^{10}} + \frac{735}{t^8} - \frac{2372}{t^6} + \frac{4578}{t^4} - \frac{6544}{t^2} -$$

$$6544 t^2 + 4578 t^4 - 2372 t^6 + 735 t^8 + 60 t^{10} - 236 t^{12} + 156 t^{14} - 58 t^{16} + 12 t^{18} - t^{20}$$

$$\text{In[*]:= eight10} = 3287 - \frac{2}{t^{20}} + \frac{19}{t^{18}} - \frac{99}{t^{16}} + \frac{351}{t^{14}} - \frac{892}{t^{12}} + \frac{1634}{t^{10}} - \frac{2074}{t^8} + \frac{1502}{t^6} + \frac{270}{t^4} - \frac{2351}{t^2} -$$

$$2351 t^2 + 270 t^4 + 1502 t^6 - 2074 t^8 + 1634 t^{10} - 892 t^{12} + 351 t^{14} - 99 t^{16} + 19 t^{18} - 2 t^{20}$$

$$\text{Out[*]:= } 3287 - \frac{2}{t^{20}} + \frac{19}{t^{18}} - \frac{99}{t^{16}} + \frac{351}{t^{14}} - \frac{892}{t^{12}} + \frac{1634}{t^{10}} - \frac{2074}{t^8} + \frac{1502}{t^6} + \frac{270}{t^4} - \frac{2351}{t^2} -$$

$$2351 t^2 + 270 t^4 + 1502 t^6 - 2074 t^8 + 1634 t^{10} - 892 t^{12} + 351 t^{14} - 99 t^{16} + 19 t^{18} - 2 t^{20}$$

$$\text{In[*]:= eight11} = 9879 + \frac{3}{t^{16}} - \frac{38}{t^{14}} + \frac{199}{t^{12}} - \frac{552}{t^{10}} + \frac{1029}{t^8} - \frac{1949}{t^6} + \frac{4339}{t^4} -$$

$$\frac{7971}{t^2} - 7971 t^2 + 4339 t^4 - 1949 t^6 + 1029 t^8 - 552 t^{10} + 199 t^{12} - 38 t^{14} + 3 t^{16}$$

$$\text{Out[*]:= } 9879 + \frac{3}{t^{16}} - \frac{38}{t^{14}} + \frac{199}{t^{12}} - \frac{552}{t^{10}} + \frac{1029}{t^8} - \frac{1949}{t^6} + \frac{4339}{t^4} - \frac{7971}{t^2} -$$

$$7971 t^2 + 4339 t^4 - 1949 t^6 + 1029 t^8 - 552 t^{10} + 199 t^{12} - 38 t^{14} + 3 t^{16}$$

$$\text{In[*]:= eight12} = 14553 + \frac{4}{t^{12}} - \frac{72}{t^{10}} + \frac{557}{t^8} - \frac{2436}{t^6} +$$

$$\frac{6669}{t^4} - \frac{12000}{t^2} - 12000 t^2 + 6669 t^4 - 2436 t^6 + 557 t^8 - 72 t^{10} + 4 t^{12}$$

$$\text{Out[*]:= } 14553 + \frac{4}{t^{12}} - \frac{72}{t^{10}} + \frac{557}{t^8} - \frac{2436}{t^6} + \frac{6669}{t^4} - \frac{12000}{t^2} - 12000 t^2 + 6669 t^4 - 2436 t^6 + 557 t^8 - 72 t^{10} + 4 t^{12}$$

$$\text{In[*]:= eight13} = 433 - \frac{1}{t^{16}} + \frac{14}{t^{14}} - \frac{98}{t^{12}} + \frac{410}{t^{10}} - \frac{1057}{t^8} + \frac{1647}{t^6} - \frac{1373}{t^4} +$$

$$\frac{242}{t^2} + 242 t^2 - 1373 t^4 + 1647 t^6 - 1057 t^8 + 410 t^{10} - 98 t^{12} + 14 t^{14} - t^{16}$$

$$\text{Out[*]:= } 433 - \frac{1}{t^{16}} + \frac{14}{t^{14}} - \frac{98}{t^{12}} + \frac{410}{t^{10}} - \frac{1057}{t^8} + \frac{1647}{t^6} - \frac{1373}{t^4} +$$

$$\frac{242}{t^2} + 242 t^2 - 1373 t^4 + 1647 t^6 - 1057 t^8 + 410 t^{10} - 98 t^{12} + 14 t^{14} - t^{16}$$

$$\text{In[*]:= eight14} = 18714 + \frac{3}{t^{16}} - \frac{40}{t^{14}} + \frac{248}{t^{12}} - \frac{948}{t^{10}} + \frac{2618}{t^8} - \frac{5829}{t^6} + \frac{10838}{t^4} -$$

$$\frac{16247}{t^2} - 16247 t^2 + 10838 t^4 - 5829 t^6 + 2618 t^8 - 948 t^{10} + 248 t^{12} - 40 t^{14} + 3 t^{16}$$

$$\text{Out[*]:= } 18714 + \frac{3}{t^{16}} - \frac{40}{t^{14}} + \frac{248}{t^{12}} - \frac{948}{t^{10}} + \frac{2618}{t^8} - \frac{5829}{t^6} + \frac{10838}{t^4} - \frac{16247}{t^2} -$$

$$16247 t^2 + 10838 t^4 - 5829 t^6 + 2618 t^8 - 948 t^{10} + 248 t^{12} - 40 t^{14} + 3 t^{16}$$

$$\text{In[*]:= eight15} = 230\,228 + \frac{129}{t^{16}} - \frac{1271}{t^{14}} + \frac{6263}{t^{12}} - \frac{20\,644}{t^{10}} + \frac{50\,993}{t^8} - \frac{99\,815}{t^6} + \frac{159\,284}{t^4} - \frac{210\,051}{t^2} - \frac{210\,051 t^2 + 159\,284 t^4 - 99\,815 t^6 + 50\,993 t^8 - 20\,644 t^{10} + 6263 t^{12} - 1271 t^{14} + 129 t^{16}}{t^{16}}$$

$$\text{Out[*]:= } 230\,228 + \frac{129}{t^{16}} - \frac{1271}{t^{14}} + \frac{6263}{t^{12}} - \frac{20\,644}{t^{10}} + \frac{50\,993}{t^8} - \frac{99\,815}{t^6} + \frac{159\,284}{t^4} - \frac{210\,051}{t^2} - \frac{210\,051 t^2 + 159\,284 t^4 - 99\,815 t^6 + 50\,993 t^8 - 20\,644 t^{10} + 6263 t^{12} - 1271 t^{14} + 129 t^{16}}{t^{16}}$$

$$\text{In[*]:= eight16} = 8109 - \frac{2}{t^{20}} + \frac{25}{t^{18}} - \frac{156}{t^{16}} + \frac{621}{t^{14}} - \frac{1709}{t^{12}} + \frac{3325}{t^{10}} - \frac{4416}{t^8} + \frac{3259}{t^6} + \frac{820}{t^4} - \frac{5821}{t^2} - \frac{5821 t^2 + 820 t^4 + 3259 t^6 - 4416 t^8 + 3325 t^{10} - 1709 t^{12} + 621 t^{14} - 156 t^{16} + 25 t^{18} - 2 t^{20}}{t^{20}}$$

$$\text{Out[*]:= } 8109 - \frac{2}{t^{20}} + \frac{25}{t^{18}} - \frac{156}{t^{16}} + \frac{621}{t^{14}} - \frac{1709}{t^{12}} + \frac{3325}{t^{10}} - \frac{4416}{t^8} + \frac{3259}{t^6} + \frac{820}{t^4} - \frac{5821}{t^2} - \frac{5821 t^2 + 820 t^4 + 3259 t^6 - 4416 t^8 + 3325 t^{10} - 1709 t^{12} + 621 t^{14} - 156 t^{16} + 25 t^{18} - 2 t^{20}}{t^{20}}$$

$$\text{In[*]:= eight17} = 35\,247 - \frac{1}{t^{20}} + \frac{12}{t^{18}} - \frac{56}{t^{16}} + \frac{108}{t^{14}} + \frac{135}{t^{12}} - \frac{1564}{t^{10}} + \frac{5571}{t^8} - \frac{13\,056}{t^6} + \frac{22\,931}{t^4} - \frac{31\,704}{t^2} - \frac{31\,704 t^2 + 22\,931 t^4 - 13\,056 t^6 + 5571 t^8 - 1564 t^{10} + 135 t^{12} + 108 t^{14} - 56 t^{16} + 12 t^{18} - t^{20}}{t^{20}}$$

$$\text{Out[*]:= } 35\,247 - \frac{1}{t^{20}} + \frac{12}{t^{18}} - \frac{56}{t^{16}} + \frac{108}{t^{14}} + \frac{135}{t^{12}} - \frac{1564}{t^{10}} + \frac{5571}{t^8} - \frac{13\,056}{t^6} + \frac{22\,931}{t^4} - \frac{31\,704}{t^2} - \frac{31\,704 t^2 + 22\,931 t^4 - 13\,056 t^6 + 5571 t^8 - 1564 t^{10} + 135 t^{12} + 108 t^{14} - 56 t^{16} + 12 t^{18} - t^{20}}{t^{20}}$$

$$\text{In[*]:= eight18} = 77\,731 + \frac{13}{t^{16}} - \frac{180}{t^{14}} + \frac{1168}{t^{12}} - \frac{4760}{t^{10}} + \frac{13\,742}{t^8} - \frac{29\,964}{t^6} + \frac{51\,208}{t^4} - \frac{70\,092}{t^2} - \frac{70\,092 t^2 + 51\,208 t^4 - 29\,964 t^6 + 13\,742 t^8 - 4760 t^{10} + 1168 t^{12} - 180 t^{14} + 13 t^{16}}{t^{16}}$$

$$\text{Out[*]:= } 77\,731 + \frac{13}{t^{16}} - \frac{180}{t^{14}} + \frac{1168}{t^{12}} - \frac{4760}{t^{10}} + \frac{13\,742}{t^8} - \frac{29\,964}{t^6} + \frac{51\,208}{t^4} - \frac{70\,092}{t^2} - \frac{70\,092 t^2 + 51\,208 t^4 - 29\,964 t^6 + 13\,742 t^8 - 4760 t^{10} + 1168 t^{12} - 180 t^{14} + 13 t^{16}}{t^{16}}$$

$$\text{In[*]:= eight19} = 215 + \frac{3}{t^{24}} - \frac{12}{t^{22}} + \frac{18}{t^{20}} - \frac{7}{t^{18}} - \frac{17}{t^{16}} + \frac{30}{t^{14}} - \frac{25}{t^{12}} + \frac{20}{t^{10}} - \frac{40}{t^8} + \frac{65}{t^6} - \frac{10}{t^4} - \frac{130}{t^2} - \frac{130 t^2 - 10 t^4 + 65 t^6 - 40 t^8 + 20 t^{10} - 25 t^{12} + 30 t^{14} - 17 t^{16} - 7 t^{18} + 18 t^{20} - 12 t^{22} + 3 t^{24}}{t^{24}}$$

$$\text{Out[*]:= } 215 + \frac{3}{t^{24}} - \frac{12}{t^{22}} + \frac{18}{t^{20}} - \frac{7}{t^{18}} - \frac{17}{t^{16}} + \frac{30}{t^{14}} - \frac{25}{t^{12}} + \frac{20}{t^{10}} - \frac{40}{t^8} + \frac{65}{t^6} - \frac{10}{t^4} - \frac{130}{t^2} - \frac{130 t^2 - 10 t^4 + 65 t^6 - 40 t^8 + 20 t^{10} - 25 t^{12} + 30 t^{14} - 17 t^{16} - 7 t^{18} + 18 t^{20} - 12 t^{22} + 3 t^{24}}{t^{24}}$$

$$\text{In[*]:= eight20} = 416 - \frac{7}{t^{12}} + \frac{46}{t^{10}} - \frac{120}{t^8} + \frac{138}{t^6} + \frac{14}{t^4} - \frac{278}{t^2} - 278 t^2 + 14 t^4 + 138 t^6 - 120 t^8 + 46 t^{10} - 7 t^{12}$$

$$\text{Out[*]:= } 416 - \frac{7}{t^{12}} + \frac{46}{t^{10}} - \frac{120}{t^8} + \frac{138}{t^6} + \frac{14}{t^4} - \frac{278}{t^2} - 278 t^2 + 14 t^4 + 138 t^6 - 120 t^8 + 46 t^{10} - 7 t^{12}$$

$$\text{In[*]:= eight21} = 2670 + \frac{1}{t^{14}} + \frac{4}{t^{12}} - \frac{60}{t^{10}} + \frac{276}{t^8} - \frac{775}{t^6} + \frac{1550}{t^4} - \frac{2331}{t^2} - 2331 t^2 + 1550 t^4 - 775 t^6 + 276 t^8 - 60 t^{10} + 4 t^{12} + t^{14}$$

$$\text{Out[*]:= } 2670 + \frac{1}{t^{14}} + \frac{4}{t^{12}} - \frac{60}{t^{10}} + \frac{276}{t^8} - \frac{775}{t^6} + \frac{1550}{t^4} - \frac{2331}{t^2} - 2331 t^2 + 1550 t^4 - 775 t^6 + 276 t^8 - 60 t^{10} + 4 t^{12} + t^{14}$$

In[*]:= Ks = {Knot[3, 1], Knot[4, 1], Knot[5, 1], Knot[5, 2], Knot[6, 1], Knot[6, 2], Knot[6, 3], Knot[7, 1], Knot[7, 2], Knot[7, 3], Knot[7, 4], Knot[7, 5], Knot[7, 6], Knot[7, 7], Knot[8, 1], Knot[8, 2], Knot[8, 3], Knot[8, 4], Knot[8, 5], Knot[8, 6], Knot[8, 7], Knot[8, 8], Knot[8, 9], Knot[8, 10], Knot[8, 11], Knot[8, 12], Knot[8, 13], Knot[8, 14], Knot[8, 15], Knot[8, 16], Knot[8, 17], Knot[8, 18], Knot[8, 19], Knot[8, 20], Knot[8, 21]};

In[*]:= OverbayP2Data =

Ks /. Knot[n_, k_] => (Knot[n, k] -> ToExpression[IntegerName[n] <> ToString[k]] /. t -> T)

$$\text{Out[*]:= } \left\{ \begin{array}{l} \text{Knot}[3, 1] \rightarrow 1 - \frac{1}{T^4} + \frac{1}{T^2} + T^2 - T^4, \text{ Knot}[4, 1] \rightarrow 5 + \frac{1}{T^4} - \frac{4}{T^2} - 4 T^2 + T^4, \\ \text{Knot}[5, 1] \rightarrow 61 + \frac{1}{T^{16}} - \frac{4}{T^{14}} + \frac{8}{T^{12}} - \frac{12}{T^{10}} + \frac{13}{T^8} - \frac{18}{T^6} + \frac{32}{T^4} - \frac{49}{T^2} - 49 T^2 + 32 T^4 - 18 T^6 + 13 T^8 - \\ 12 T^{10} + 8 T^{12} - 4 T^{14} + T^{16}, \text{ Knot}[5, 2] \rightarrow 80 + \frac{3}{T^8} - \frac{14}{T^6} + \frac{31}{T^4} - \frac{59}{T^2} - 59 T^2 + 31 T^4 - 14 T^6 + 3 T^8, \\ \text{Knot}[6, 1] \rightarrow -70 - \frac{1}{T^8} + \frac{10}{T^6} - \frac{32}{T^4} + \frac{57}{T^2} + 57 T^2 - 32 T^4 + 10 T^6 - T^8, \\ \text{Knot}[6, 2] \rightarrow 87 - \frac{1}{T^{12}} + \frac{14}{T^{10}} - \frac{63}{T^8} + \frac{135}{T^6} - \frac{131}{T^4} + \frac{2}{T^2} + 2 T^2 - 131 T^4 + 135 T^6 - 63 T^8 + 14 T^{10} - T^{12}, \\ \text{Knot}[6, 3] \rightarrow 405 - \frac{1}{T^{12}} + \frac{4}{T^{10}} + \frac{2}{T^8} - \frac{52}{T^6} + \frac{177}{T^4} - \frac{332}{T^2} - 332 T^2 + 177 T^4 - 52 T^6 + 2 T^8 + 4 T^{10} - T^{12}, \\ \text{Knot}[7, 1] \rightarrow 438 + \frac{3}{T^{24}} - \frac{12}{T^{22}} + \frac{27}{T^{20}} - \frac{48}{T^{18}} + \frac{72}{T^{16}} - \frac{96}{T^{14}} + \frac{114}{T^{12}} - \frac{141}{T^{10}} + \frac{189}{T^8} - \frac{255}{T^6} + \frac{333}{T^4} - \frac{402}{T^2} - 402 T^2 + \\ 333 T^4 - 255 T^6 + 189 T^8 - 141 T^{10} + 114 T^{12} - 96 T^{14} + 72 T^{16} - 48 T^{18} + 27 T^{20} - 12 T^{22} + 3 T^{24}, \\ \text{Knot}[7, 2] \rightarrow 1593 + \frac{42}{T^8} - \frac{248}{T^6} + \frac{705}{T^4} - \frac{1294}{T^2} - 1294 T^2 + 705 T^4 - 248 T^6 + 42 T^8, \\ \text{Knot}[7, 3] \rightarrow 3849 + \frac{23}{T^{16}} - \frac{130}{T^{14}} + \frac{372}{T^{12}} - \frac{740}{T^{10}} + \frac{1193}{T^8} - \frac{1793}{T^6} + \frac{2615}{T^4} - \\ \frac{3462}{T^2} - 3462 T^2 + 2615 T^4 - 1793 T^6 + 1193 T^8 - 740 T^{10} + 372 T^{12} - 130 T^{14} + 23 T^{16}, \\ \text{Knot}[7, 4] \rightarrow 4994 + \frac{112}{T^8} - \frac{720}{T^6} + \frac{2177}{T^4} - \frac{4064}{T^2} - 4064 T^2 + 2177 T^4 - 720 T^6 + 112 T^8, \\ \text{Knot}[7, 5] \rightarrow 12090 + \frac{23}{T^{16}} - \frac{168}{T^{14}} + \frac{632}{T^{12}} - \frac{1652}{T^{10}} + \frac{3389}{T^8} - \frac{5847}{T^6} + \frac{8697}{T^4} - \frac{11117}{T^2} - \\ 11117 T^2 + 8697 T^4 - 5847 T^6 + 3389 T^8 - 1652 T^{10} + 632 T^{12} - 168 T^{14} + 23 T^{16}, \\ \text{Knot}[7, 6] \rightarrow 499 + \frac{8}{T^{10}} - \frac{60}{T^8} + \frac{155}{T^6} - \frac{99}{T^4} - \frac{253}{T^2} - 253 T^2 - 99 T^4 + 155 T^6 - 60 T^8 + 8 T^{10}, \\ \text{Knot}[7, 7] \rightarrow 929 - \frac{1}{T^{12}} + \frac{12}{T^{10}} - \frac{46}{T^8} + \frac{36}{T^6} + \frac{207}{T^4} - \frac{673}{T^2} - 673 T^2 + 207 T^4 + 36 T^6 - 46 T^8 + 12 T^{10} - T^{12}, \end{array} \right.$$

$$\begin{aligned}
 \text{Knot}[8, 1] &\rightarrow 117 - \frac{3}{T^8} + \frac{20}{T^6} - \frac{14}{T^4} - \frac{63}{T^2} - 63 T^2 - 14 T^4 + 20 T^6 - 3 T^8, \text{Knot}[8, 2] \rightarrow \\
 &5698 + \frac{1}{T^{24}} - \frac{12}{T^{22}} + \frac{63}{T^{20}} - \frac{194}{T^{18}} + \frac{407}{T^{16}} - \frac{628}{T^{14}} + \frac{738}{T^{12}} - \frac{742}{T^{10}} + \frac{962}{T^8} - \frac{1826}{T^6} + \frac{3361}{T^4} - \frac{4979}{T^2} - 4979 T^2 + \\
 &3361 T^4 - 1826 T^6 + 962 T^8 - 742 T^{10} + 738 T^{12} - 628 T^{14} + 407 T^{16} - 194 T^{18} + 63 T^{20} - 12 T^{22} + T^{24}, \\
 \text{Knot}[8, 3] &\rightarrow -2422 - \frac{16}{T^8} + \frac{176}{T^6} - \frac{795}{T^4} + \frac{1848}{T^2} + 1848 T^2 - 795 T^4 + 176 T^6 - 16 T^8, \\
 \text{Knot}[8, 4] &\rightarrow 1773 - \frac{1}{T^{16}} + \frac{10}{T^{14}} - \frac{60}{T^{12}} + \frac{268}{T^{10}} - \frac{761}{T^8} + \frac{1205}{T^6} - \frac{697}{T^4} - \frac{852}{T^2} - \\
 &852 T^2 - 697 T^4 + 1205 T^6 - 761 T^8 + 268 T^{10} - 60 T^{12} + 10 T^{14} - T^{16}, \text{Knot}[8, 5] \rightarrow \\
 &10965 + \frac{1}{T^{24}} - \frac{12}{T^{22}} + \frac{65}{T^{20}} - \frac{214}{T^{18}} + \frac{501}{T^{16}} - \frac{927}{T^{14}} + \frac{1492}{T^{12}} - \frac{2298}{T^{10}} + \frac{3596}{T^8} - \frac{5579}{T^6} + \frac{8009}{T^4} - \frac{10117}{T^2} - 10117 T^2 + \\
 &8009 T^4 - 5579 T^6 + 3596 T^8 - 2298 T^{10} + 1492 T^{12} - 927 T^{14} + 501 T^{16} - 214 T^{18} + 65 T^{20} - 12 T^{22} + T^{24}, \\
 \text{Knot}[8, 6] &\rightarrow 6782 + \frac{3}{T^{16}} - \frac{36}{T^{14}} + \frac{182}{T^{12}} - \frac{498}{T^{10}} + \frac{915}{T^8} - \frac{1593}{T^6} + \frac{3179}{T^4} - \frac{5544}{T^2} - \\
 &5544 T^2 + 3179 T^4 - 1593 T^6 + 915 T^8 - 498 T^{10} + 182 T^{12} - 36 T^{14} + 3 T^{16}, \\
 \text{Knot}[8, 7] &\rightarrow 3280 - \frac{1}{T^{20}} + \frac{10}{T^{18}} - \frac{58}{T^{16}} + \frac{238}{T^{14}} - \frac{692}{T^{12}} + \frac{1401}{T^{10}} - \frac{1908}{T^8} + \frac{1464}{T^6} + \frac{226}{T^4} - \frac{2319}{T^2} - \\
 &2319 T^2 + 226 T^4 + 1464 T^6 - 1908 T^8 + 1401 T^{10} - 692 T^{12} + 238 T^{14} - 58 T^{16} + 10 T^{18} - T^{20}, \\
 \text{Knot}[8, 8] &\rightarrow 114 - \frac{1}{T^{16}} + \frac{12}{T^{14}} - \frac{82}{T^{12}} + \frac{326}{T^{10}} - \frac{790}{T^8} + \frac{1179}{T^6} - \frac{996}{T^4} + \frac{296}{T^2} + \\
 &296 T^2 - 996 T^4 + 1179 T^6 - 790 T^8 + 326 T^{10} - 82 T^{12} + 12 T^{14} - T^{16}, \\
 \text{Knot}[8, 9] &\rightarrow 7338 - \frac{1}{T^{20}} + \frac{12}{T^{18}} - \frac{58}{T^{16}} + \frac{156}{T^{14}} - \frac{236}{T^{12}} + \frac{60}{T^{10}} + \frac{735}{T^8} - \frac{2372}{T^6} + \frac{4578}{T^4} - \frac{6544}{T^2} - \\
 &6544 T^2 + 4578 T^4 - 2372 T^6 + 735 T^8 + 60 T^{10} - 236 T^{12} + 156 T^{14} - 58 T^{16} + 12 T^{18} - T^{20}, \\
 \text{Knot}[8, 10] &\rightarrow 3287 - \frac{2}{T^{20}} + \frac{19}{T^{18}} - \frac{99}{T^{16}} + \frac{351}{T^{14}} - \frac{892}{T^{12}} + \frac{1634}{T^{10}} - \frac{2074}{T^8} + \frac{1502}{T^6} + \frac{270}{T^4} - \frac{2351}{T^2} - \\
 &2351 T^2 + 270 T^4 + 1502 T^6 - 2074 T^8 + 1634 T^{10} - 892 T^{12} + 351 T^{14} - 99 T^{16} + 19 T^{18} - 2 T^{20}, \\
 \text{Knot}[8, 11] &\rightarrow 9879 + \frac{3}{T^{16}} - \frac{38}{T^{14}} + \frac{199}{T^{12}} - \frac{552}{T^{10}} + \frac{1029}{T^8} - \frac{1949}{T^6} + \frac{4339}{T^4} - \frac{7971}{T^2} - 7971 T^2 + \\
 &4339 T^4 - 1949 T^6 + 1029 T^8 - 552 T^{10} + 199 T^{12} - 38 T^{14} + 3 T^{16}, \text{Knot}[8, 12] \rightarrow \\
 &14553 + \frac{4}{T^{12}} - \frac{72}{T^{10}} + \frac{557}{T^8} - \frac{2436}{T^6} + \frac{6669}{T^4} - \frac{12000}{T^2} - 12000 T^2 + 6669 T^4 - 2436 T^6 + 557 T^8 - 72 T^{10} + 4 T^{12}, \\
 \text{Knot}[8, 13] &\rightarrow 433 - \frac{1}{T^{16}} + \frac{14}{T^{14}} - \frac{98}{T^{12}} + \frac{410}{T^{10}} - \frac{1057}{T^8} + \frac{1647}{T^6} - \frac{1373}{T^4} + \frac{242}{T^2} + \\
 &242 T^2 - 1373 T^4 + 1647 T^6 - 1057 T^8 + 410 T^{10} - 98 T^{12} + 14 T^{14} - T^{16}, \\
 \text{Knot}[8, 14] &\rightarrow 18714 + \frac{3}{T^{16}} - \frac{40}{T^{14}} + \frac{248}{T^{12}} - \frac{948}{T^{10}} + \frac{2618}{T^8} - \frac{5829}{T^6} + \frac{10838}{T^4} - \frac{16247}{T^2} - \\
 &16247 T^2 + 10838 T^4 - 5829 T^6 + 2618 T^8 - 948 T^{10} + 248 T^{12} - 40 T^{14} + 3 T^{16}, \\
 \text{Knot}[8, 15] &\rightarrow 230228 + \frac{129}{T^{16}} - \frac{1271}{T^{14}} + \frac{6263}{T^{12}} - \frac{20644}{T^{10}} + \frac{50993}{T^8} - \frac{99815}{T^6} + \frac{159284}{T^4} - \frac{210051}{T^2} - \\
 &210051 T^2 + 159284 T^4 - 99815 T^6 + 50993 T^8 - 20644 T^{10} + 6263 T^{12} - 1271 T^{14} + 129 T^{16}, \\
 \text{Knot}[8, 16] &\rightarrow 8109 - \frac{2}{T^{20}} + \frac{25}{T^{18}} - \frac{156}{T^{16}} + \frac{621}{T^{14}} - \frac{1709}{T^{12}} + \frac{3325}{T^{10}} - \frac{4416}{T^8} + \frac{3259}{T^6} + \frac{820}{T^4} - \frac{5821}{T^2} - \\
 &5821 T^2 + 820 T^4 + 3259 T^6 - 4416 T^8 + 3325 T^{10} - 1709 T^{12} + 621 T^{14} - 156 T^{16} + 25 T^{18} - 2 T^{20}, \\
 \text{Knot}[8, 17] &\rightarrow 35247 - \frac{1}{T^{20}} + \frac{12}{T^{18}} - \frac{56}{T^{16}} + \frac{108}{T^{14}} + \frac{135}{T^{12}} - \frac{1564}{T^{10}} + \frac{5571}{T^8} - \frac{13056}{T^6} + \frac{22931}{T^4} - \frac{31704}{T^2} - \\
 &31704 T^2 + 22931 T^4 - 13056 T^6 + 5571 T^8 - 1564 T^{10} + 135 T^{12} + 108 T^{14} - 56 T^{16} + 12 T^{18} - T^{20},
 \end{aligned}$$

$$\begin{aligned} \text{Knot}[8, 18] &\rightarrow 77731 + \frac{13}{T^{16}} - \frac{180}{T^{14}} + \frac{1168}{T^{12}} - \frac{4760}{T^{10}} + \frac{13742}{T^8} - \frac{29964}{T^6} + \frac{51208}{T^4} - \frac{70092}{T^2} - \\ &70092 T^2 + 51208 T^4 - 29964 T^6 + 13742 T^8 - 4760 T^{10} + 1168 T^{12} - 180 T^{14} + 13 T^{16}, \\ \text{Knot}[8, 19] &\rightarrow 215 + \frac{3}{T^{24}} - \frac{12}{T^{22}} + \frac{18}{T^{20}} - \frac{7}{T^{18}} - \frac{17}{T^{16}} + \frac{30}{T^{14}} - \frac{25}{T^{12}} + \frac{20}{T^{10}} - \frac{40}{T^8} + \frac{65}{T^6} - \frac{10}{T^4} - \frac{130}{T^2} - \\ &130 T^2 - 10 T^4 + 65 T^6 - 40 T^8 + 20 T^{10} - 25 T^{12} + 30 T^{14} - 17 T^{16} - 7 T^{18} + 18 T^{20} - 12 T^{22} + 3 T^{24}, \\ \text{Knot}[8, 20] &\rightarrow 416 - \frac{7}{T^{12}} + \frac{46}{T^{10}} - \frac{120}{T^8} + \frac{138}{T^6} + \frac{14}{T^4} - \frac{278}{T^2} - 278 T^2 + 14 T^4 + 138 T^6 - 120 T^8 + 46 T^{10} - 7 T^{12}, \\ \text{Knot}[8, 21] &\rightarrow 2670 + \frac{1}{T^{14}} + \frac{4}{T^{12}} - \frac{60}{T^{10}} + \frac{276}{T^8} - \frac{775}{T^6} + \frac{1550}{T^4} - \\ &\frac{2331}{T^2} - 2331 T^2 + 1550 T^4 - 775 T^6 + 276 T^8 - 60 T^{10} + 4 T^{12} + T^{14} \} \end{aligned}$$

In[*]:= **OverbayP2Data** >> "OverbayP2Data.m"

In[*]:= **Ks /. OverbayP2Data /. T -> 1**

Out[*]:= {1, -1, 3, 2, -2, -1, 1, 6, 3, 5, 4, 4, 1, -1, -3, 0,
4, -3, -1, -2, 2, 2, -2, 3, -1, -3, 1, 0, 4, 1, -1, 1, 5, 2, 0}

In[*]:= **Ks /. OverbayP2Data /. T -> -1**

Out[*]:= {1, -1, 3, 2, -2, -1, 1, 6, 3, 5, 4, 4, 1, -1, -3, 0,
4, -3, -1, -2, 2, 2, -2, 3, -1, -3, 1, 0, 4, 1, -1, 1, 5, 2, 0}