

$$N = \begin{array}{c} \begin{array}{c} P_{0,0} = \frac{45}{16} \\ P_{0,1} = \frac{34506}{107144} \\ P_{0,2} = \frac{116568}{345060} \\ P_{0,3} = \frac{249996}{1071440} \\ P_{0,4} = \frac{479996}{2142880} \\ P_{0,5} = \frac{709996}{3214320} \\ P_{0,6} = \frac{939996}{4285760} \\ P_{0,7} = \frac{1169996}{5357200} \\ P_{0,8} = \frac{1399996}{6428640} \\ P_{0,9} = \frac{1629996}{7500080} \\ P_{0,10} = \frac{1859996}{8571520} \\ P_{0,11} = \frac{2089996}{9642960} \\ P_{0,12} = \frac{2319996}{10714400} \\ P_{0,13} = \frac{2549996}{11785840} \\ P_{0,14} = \frac{2779996}{12857280} \\ P_{0,15} = \frac{3009996}{13928720} \\ P_{0,16} = \frac{3239996}{15000160} \\ P_{0,17} = \frac{3469996}{16071600} \\ P_{0,18} = \frac{3699996}{17143040} \\ P_{0,19} = \frac{3929996}{18214480} \\ P_{0,20} = \frac{4159996}{19285920} \\ P_{0,21} = \frac{4389996}{20357360} \\ P_{0,22} = \frac{4619996}{21428800} \\ P_{0,23} = \frac{4849996}{22500240} \\ P_{0,24} = \frac{5079996}{23571680} \\ P_{0,25} = \frac{5309996}{24643120} \\ P_{0,26} = \frac{5539996}{25714560} \\ P_{0,27} = \frac{5769996}{26786000} \\ P_{0,28} = \frac{5999996}{27857440} \\ P_{0,29} = \frac{6229996}{28928880} \\ P_{0,30} = \frac{6459996}{30000320} \\ P_{0,31} = \frac{6689996}{31071760} \\ P_{0,32} = \frac{6919996}{32143200} \\ P_{0,33} = \frac{7149996}{33214640} \\ P_{0,34} = \frac{7379996}{34286080} \\ P_{0,35} = \frac{7609996}{35357520} \\ P_{0,36} = \frac{7839996}{36428960} \\ P_{0,37} = \frac{8069996}{37500400} \\ P_{0,38} = \frac{8299996}{38571840} \\ P_{0,39} = \frac{8529996}{39643280} \\ P_{0,40} = \frac{8759996}{40714720} \\ P_{0,41} = \frac{8989996}{41786160} \\ P_{0,42} = \frac{9219996}{42857600} \\ P_{0,43} = \frac{9449996}{43929040} \\ P_{0,44} = \frac{9679996}{45000480} \\ P_{0,45} = \frac{9909996}{46071920} \\ P_{0,46} = \frac{10139996}{47143360} \\ P_{0,47} = \frac{10369996}{48214800} \\ P_{0,48} = \frac{10599996}{49286240} \\ P_{0,49} = \frac{10829996}{50357680} \\ P_{0,50} = \frac{11059996}{51429120} \\ P_{0,51} = \frac{11289996}{52500560} \\ P_{0,52} = \frac{11519996}{53572000} \\ P_{0,53} = \frac{11749996}{54643440} \\ P_{0,54} = \frac{11979996}{55714880} \\ P_{0,55} = \frac{12209996}{56786320} \\ P_{0,56} = \frac{12439996}{57857760} \\ P_{0,57} = \frac{12669996}{58929200} \\ P_{0,58} = \frac{12899996}{59999640} \\ P_{0,59} = \frac{13129996}{61071080} \\ P_{0,60} = \frac{13359996}{62142520} \\ P_{0,61} = \frac{13589996}{63213960} \\ P_{0,62} = \frac{13819996}{64285400} \\ P_{0,63} = \frac{14049996}{65356840} \\ P_{0,64} = \frac{14279996}{66428280} \\ P_{0,65} = \frac{14509996}{67499720} \\ P_{0,66} = \frac{14739996}{68571160} \\ P_{0,67} = \frac{14969996}{69642600} \\ P_{0,68} = \frac{15199996}{70714040} \\ P_{0,69} = \frac{15429996}{71785480} \\ P_{0,70} = \frac{15659996}{72856920} \\ P_{0,71} = \frac{15889996}{73928360} \\ P_{0,72} = \frac{16119996}{75000800} \\ P_{0,73} = \frac{16349996}{76072240} \\ P_{0,74} = \frac{16579996}{77143680} \\ P_{0,75} = \frac{16809996}{78215120} \\ P_{0,76} = \frac{17039996}{79286560} \\ P_{0,77} = \frac{17269996}{80358000} \\ P_{0,78} = \frac{17499996}{81429440} \\ P_{0,79} = \frac{17729996}{82500880} \\ P_{0,80} = \frac{17959996}{83572320} \\ P_{0,81} = \frac{18189996}{84643760} \\ P_{0,82} = \frac{18419996}{85715200} \\ P_{0,83} = \frac{18649996}{86786640} \\ P_{0,84} = \frac{18879996}{87858080} \\ P_{0,85} = \frac{19109996}{88929520} \\ P_{0,86} = \frac{19339996}{90000960} \\ P_{0,87} = \frac{19569996}{91072400} \\ P_{0,88} = \frac{19799996}{92143840} \\ P_{0,89} = \frac{20029996}{93215280} \\ P_{0,90} = \frac{20259996}{94286720} \\ P_{0,91} = \frac{20489996}{95358160} \\ P_{0,92} = \frac{20719996}{96429600} \\ P_{0,93} = \frac{20949996}{97501040} \\ P_{0,94} = \frac{21179996}{98572480} \\ P_{0,95} = \frac{21409996}{99643920} \\ P_{0,96} = \frac{21639996}{100715360} \\ P_{0,97} = \frac{21869996}{101786800} \\ P_{0,98} = \frac{22099996}{102858240} \\ P_{0,99} = \frac{22329996}{103929680} \\ P_{0,100} = \frac{22559996}{105001120} \end{array} \end{array}$$

$$t = N\mathbf{1}$$
[illegible]

Finally, we see that $t_0 = \boxed{\frac{213}{29} \approx 7.345}$