$$H_0 = 1$$
$$H_1 = 2x$$
$$H_2 = 4x^2 - 2$$
$$H_3 = 8x^3 - 12x$$
$$H_4 = 16x^4 - 48x^2 + 12$$
$$H_5 = 32x^5 - 160x^3 + 120x$$
$$H_6 = 64x^6 - 480x^4 + 720x^2 - 120$$
$$H_7 = 128x^7 - 1344x^5 + 3360x^3 - 1680x$$
$$H_8 = 256x^8 - 3584x^6 + 13440x^4 - 13440x^2 + 1680$$
$$H_9 = 512x^9 - 9216x^7 + 48384x^5 - 80640x^3 + 30240x$$
$$H_{10} = 1024x^{10} - 23040x^8 + 161280x^6 - 403200x^4 + 302400x^2 - 30240$$

$$x^{10} = (30240H_0 + 75600H_2 + 25200H_4 + 2520H_6 + 90H_8 + H_{10})/1024$$
$$x^9 = (15120H_1 + 10080H_3 + 1512H_5 + 72H_7 + H_9)/512$$
$$x^8 = (1680H_0 + 3360H_2 + 840H_4 + 56H_6 + H_8)/256$$
$$x^7 = (840H_1 + 420H_3 + 42H_5 + H_7)/128$$
$$x^6 = (120H_0 + 180H_2 + 30H_4 + H_6)/64$$
$$x^5 = (60H_1 + 20H_3 + H_5)/32$$
$$x^4 = (12H_0 + 12H_2 + H_4)/16$$
$$x^3 = (6H_1 + H_3)/8$$
$$x^2 = (2H_0 + H_2)/4$$
$$x = (H_1)/2$$
$$1 = H_0$$

$$L_0 = 1$$
$$L_1 = -x + 1$$
$$L_2 = (x^2 - 4x + 2)/2$$
$$L_3 = (-x^3 + 9x^2 - 18x + 6)/6$$
$$L_4 = (x^4 - 16x^3 + 72x^2 - 96x + 24)/24$$
$$L_5 = (-x^5 + 25x^4 - 200x^3 + 600x^2 - 600x + 120)/120$$
$$L_6 = (x^6 - 36x^5 + 450x^4 - 2400x^3 + 5400x^2 - 4320x + 720)/720$$

$$x^6 = 720L_0 - 4320L_1 + 10800L_2 - 14400L_3 + 10800L_4 - 4320L_5 + 720L_6$$
$$x^5 = 120L_0 - 600L_1 + 1200L_2 - 1200L_3 + 600L_4 - 120L_5$$
$$x^4 = 24L_0 - 96L_1 + 144L_2 - 96L_3 + 24L_4$$
$$x^3 = 6L_0 - 18L_1 + 18L_2 - 6L_3$$
$$x^2 = 2L_0 - 4L_1 + 2L_2$$
$$x = L_0 - L_1$$
$$1 = L_0$$

$$P_0 = 1$$
$$P_1 = x$$
$$P_2 = (3x^2 - 1)/2$$
$$P_3 = (5x^3 - 3x)/2$$
$$P_4 = (35x^4 - 30x^2 + 3)/8$$
$$P_5 = (63x^5 - 70x^3 + 15x)/8$$
$$P_6 = (231x^6 - 315x^4 + 105x^2 - 5)/16$$
$$P_7 = (429x^7 - 693x^5 + 315x^3 - 35x)/16$$
$$P_8 = (6435x^8 - 12012x^6 + 6930x^4 - 1260x^2 + 35)/128$$
$$P_9 = (12155x^9 - 25740x^7 + 18018x^5 - 4620x^3 + 315x)/128$$
$$P_{10} = (46189x^{10} - 109395x^8 + 90090x^6 - 30030x^4 + 3465x^2 - 63)/256$$

$$x^{10} = (4199P_0 + 16150P_2 + 15504P_4 + 7904P_6 + 2176P_8 + 256P_{10})/46189$$
$$x^9 = (3315P_1 + 4760P_3 + 2992P_5 + 960P_7 + 128P_9)/12155$$
$$x^8 = (715P_0 + 2600P_2 + 2160P_4 + 832P_6 + 128P_8)/6435$$
$$x^7 = (143P_1 + 182P_3 + 88P_5 + 16P_7)/429$$
$$x^6 = (33P_0 + 110P_2 + 72P_4 + 16P_6)/231$$
$$x^5 = (27P_1 + 28P_3 + 8P_5)/63$$
$$x^4 = (7P_0 + 20P_2 + 8P_4)/35$$
$$x^3 = (3P_1 + 2P_3)/5$$
$$x^2 = (P_0 + 2P_2)/3$$
$$x = P_1$$
$$1 = P_0$$

$$T_0 = 1$$
$$T_1 = x$$
$$T_2 = 2x^2 - 1$$
$$T_3 = 4x^3 - 3x$$
$$T_4 = 8x^4 - 8x^2 + 1$$
$$T_5 = 16x^5 - 20x^3 + 5x$$
$$T_6 = 32x^6 - 48x^4 + 18x^2 - 1$$
$$T_7 = 64x^7 - 112x^5 + 56x^3 - 7x$$
$$T_8 = 128x^8 - 256x^6 + 160x^4 - 32x^2 + 1$$
$$T_9 = 256x^9 - 576x^7 + 432x^5 - 120x^3 + 9x$$
$$T_{10} = 512x^{10} - 1280x^8 + 1120x^6 - 400x^4 + 50x^2 - 1$$

$$x^{10} = (126T_0 + 210T_2 + 120T_4 + 45T_6 + 10T_8 + T_{10})/512$$
$$x^9 = (126T_1 + 84T_3 + 36T_5 + 9T_7 + T_9)/256$$
$$x^8 = (35T_0 + 56T_2 + 28T_4 + 8T_6 + T_8)/128$$
$$x^7 = (35T_1 + 21T_3 + 7T_5 + T_7)/64$$
$$x^6 = (10T_0 + 15T_2 + 6T_4 + T_6)/32$$
$$x^5 = (10T_1 + 5T_3 + T_5)/16$$
$$x^4 = (3T_0 + 4T_2 + T_4)/8$$
$$x^3 = (3T_1 + T_3)/4$$
$$x^2 = (T_0 + T_2)/2$$
$$x = T_1$$
$$1 = T_0$$

$$U_0 = 1$$
$$U_1 = 2x$$
$$U_2 = 4x^2 - 1$$
$$U_3 = 8x^3 - 4x$$
$$U_4 = 16x^4 - 12x^2 + 1$$
$$U_5 = 32x^5 - 32x^3 + 6x$$
$$U_6 = 64x^6 - 80x^4 + 24x^2 - 1$$
$$U_7 = 128x^7 - 192x^5 + 80x^3 - 8x$$
$$U_8 = 256x^8 - 448x^6 + 240x^4 - 40x^2 + 1$$
$$U_9 = 512x^9 - 1024x^7 + 672x^5 - 160x^3 + 10x$$
$$U_{10} = 1024x^{10} - 2304x^8 + 1792x^6 - 560x^4 + 60x^2 - 1$$

$$x^{10} = (42U_0 + 90U_2 + 75U_4 + 35U_6 + 9U_8 + U_{10})/1024$$
$$x^9 = (42U_1 + 48U_3 + 27U_5 + 8U_7 + U_9)/512$$
$$x^8 = (14U_0 + 28U_2 + 20U_4 + 7U_6 + U_8)/256$$
$$x^7 = (14U_1 + 14U_3 + 6U_5 + U_7)/128$$
$$x^6 = (5U_0 + 9U_2 + 5U_4 + U_6)/64$$
$$x^5 = (5U_1 + 4U_3 + U_5)/32$$
$$x^4 = (2U_0 + 3U_2 + U_4)/16$$
$$x^3 = (2U_1 + U_3)/8$$
$$x^2 = (U_0 + U_2)/4$$
$$x = (U_1)/2$$
$$1 = U_0$$