4.

a).

For n:19, our a19:0.4

For n:19, our b19:-0.392774881565715

For n:19, our c19:-0.5361255921714183

For n:19, our d19:0.5956951024126856

For n:18, our a18:0.5

For n:18, our b18:-0.17890047373713686

For n:18, our c18:0.0014395725999735848

For n:18, our d18:-0.4479709706428262

For n:17, our a17:0.6

For n:17, our b17:-0.14133530896574226

For n:17, our c17:-0.06404818055229802

For n:17, our d17:0.03638208508459536

For n:16, our a16:0.7

For n:16, our b16:-0.4929486542894339

For n:16, our c16:0.9430815438615265

For n:16, our d16:-0.8392747703448531

For n:15, our a15:0.9

For n:15, our b15:-0.7311782282626832

For n:15, our c15:-0.14898296395069272

For n:15, our d15:1.213405008680248

For n:14, our a14:1.4

For n:14, our b14:-0.5318299146351858

For n:14, our c14:-0.1002024280836788

For n:14, our d14:-0.02032522327792245

For n:13, our a13:1.95

For n:13, our b13:-0.33583409646917955

For n:13, our c13:-0.05056358589017213

For n:13, our d13:-0.012727908254745292

For n:12, our a12:2.25

For n:12, our b12:-0.139008110129848

For n:12, our c12:-0.11345806939260421

For n:12, our d12:0.017470689861786695

For n:11, our a11:2.3

For n:11, our b11:0.01455815086709239

For n:11, our c11:-0.04010819160433621

For n:11, our d11:-0.024449959262756

For n:10, our a10:2.25

For n:10, our b10:0.08077550666147848

For n:10, our c10:-0.026109164190049883

For n:10, our d10:-0.004666342471428775

For n:9, our a9:2.1

For n:9, our b9:0.2623398224869929

For n:9, our c9:-0.15545515163546453

For n:9, our d9:0.04311532914847155

For n:8, our a8:2.05

For n:8, our b8:-0.07131619046462218

For n:8, our c8:1.267641861474182

For n:8, our d8:-1.5812189034551638

For n:7, our a7:2.15

For n:7, our b7:-0.4770750606285027

For n:7, our c7:0.08488770573875365

For n:7, our d7:1.314171284150477

For n:6, our a6:2.4

For n:6, our b6:-0.5034060258736166

For n:6, our c6:-0.032225775248525754
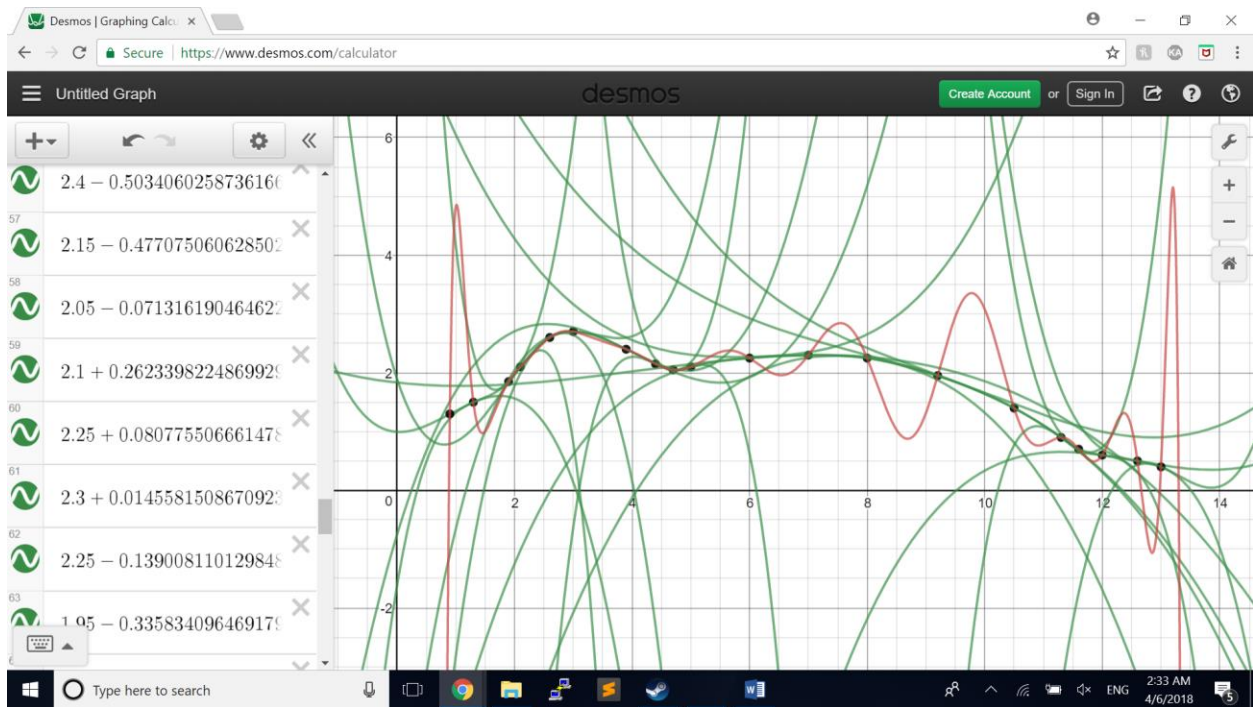
For n:6, our d6:0.07807565399151953

For n:5, our a5:2.7

For n:5, our b5:-0.022191145976440896

For n:5, our c5:-0.5024574246372251

For n:5, our d5:0.17415987014396273

For n:4, our a4:2.6

For n:4, our b4:0.5933993220979927

For n:4, our c4:-1.0365187455488594

For n:4, our d4:0.44505110075969534

For n:3, our a3:2.1

For n:3, our b3:1.294941983029585

For n:3, our c3:-0.36656657631432493

For n:3, our d3:-0.44663477948968966

For n:2, our a2:1.85

For n:2, our b2:1.086802718677962

For n:2, our c2:1.407262898072437

For n:2, our d2:-2.956382457311267

For n:1, our a1:1.5

For n:1, our b1:0.42075230148753845

For n:1, our c1:-0.29717886942173055

For n:1, our d1:0.9469120930523156

For n:0, our a0:1.3

For n:0, our b0:0.5396238492562306

For n:0, our c0:0.0

For n:0, our d0:-0.2476490578514421

b).

F(0):1.3

F(1):0.4999999999999999

F(2):0.08333333333333372

F(3):0.6249999999999981

F(4):-0.9063240680887712

F(5):0.5668351256586526

F(6):-0.18391194861782978

F(7):0.03874690604922625

F(8):-0.0025481504155956077

F(9):-0.0018586750299486596

F(10):0.0005729317636593806

F(11):-6.34107592999165e-06

F(12):-4.290233994816249e-05

F(13):1.5798171679188234e-05

F(14):-3.453534469332749e-06

F(15):6.085950046764253e-07

F(16):-9.860361084436146e-08

F(17):1.4695484208907752e-08

F(18):-1.9837133192976805e-09

F(19):2.5185394950467503e-10

F(20):-3.0745307801080036e-11

c).

Spline piecewise graph: Green

Newtons Interpolation: Orange

Black points.