**Problem 3**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| lambda | cp, sig=.05 | cp, sig=.1 |  | cp,thetaz=.01 | cp,thetaz=.1 |
| 0.5 | 7.51E-02 | 0.144292 |  | 7.51E-02 | 7.18E-02 |
| 1 | 0.143598 | 0.264345 |  | 0.143598 | 0.131061 |
| 1.5 | 0.205765 | 0.36216 |  | 0.205765 | 0.179232 |
| 2 | 0.261935 | 0.43973 |  | 0.261935 | 0.217582 |
| 2.5 | 0.312422 | 0.499035 |  | 0.312422 | 0.247247 |
| 3 | 0.357542 | 0.542043 |  | 0.357542 | 0.269217 |
| 3.5 | 0.397605 | 0.570695 |  | 0.397605 | 0.284322 |
| 4 | 0.43292 | 0.586904 |  | 0.43292 | 0.293235 |
| 4.5 | 0.463794 | 0.59254 |  | 0.463794 | 0.296485 |
| 5 | 0.490528 | 0.589416 |  | 0.490528 | 0.294456 |
| 5.5 | 0.51342 | 0.579272 |  | 0.51342 | 0.287413 |
| 6 | 0.532762 | 0.563751 |  | 0.532762 | 0.275511 |
| 6.5 | 0.548843 | 0.544378 |  | 0.548843 | 0.258812 |
| 7 | 0.561941 | 0.522529 |  | 0.561941 | 0.237303 |
| 7.5 | 0.572331 | 0.499412 |  | 0.572331 | 0.210907 |
| 8 | 0.580277 | 0.476044 |  | 0.580277 | 0.179499 |
| 8.5 | 0.586036 | 0.453241 |  | 0.586036 | 0.142912 |
| 9 | 0.589853 | 0.431615 |  | 0.589853 | 0.10095 |
| 9.5 | 0.591964 | 0.411588 |  | 0.591964 | 5.34E-02 |
| 10 | 0.592592 | 0.393414 |  | 0.592592 | -2.57E-08 |
| 10.5 | 0.591947 | 0.377206 |  | 0.591947 | -5.95E-02 |
| 11 | 0.590226 | 0.362971 |  | 0.590226 | -0.125316 |
| 11.5 | 0.587614 | 0.350639 |  | 0.587614 | -0.197775 |
| 12 | 0.584279 | 0.340093 |  | 0.584279 | -0.277139 |
| 12.5 | 0.580374 | 0.331189 |  | 0.580374 | -0.363689 |
| 13 | 0.576041 | 0.323773 |  | 0.576041 | -0.457713 |
| 13.5 | 0.571404 | 0.317692 |  | 0.571404 | -0.559499 |
| 14 | 0.566573 | 0.312799 |  | 0.566573 | -0.669339 |
| 14.5 | 0.561645 | 0.308961 |  | 0.561645 | -0.787525 |
| 15 | 0.556704 | 0.306056 |  | 0.556704 | -0.91435 |
| 15.5 | 0.551821 | 0.303976 |  | 0.551821 | -1.05011 |
| 16 | 0.547055 | 0.302625 |  | 0.547055 | -1.19509 |
| 16.5 | 0.542455 | 0.30192 |  | 0.542455 | -1.3496 |
| 17 | 0.53806 | 0.301788 |  | 0.53806 | -1.51393 |
| 17.5 | 0.533902 | 0.302164 |  | 0.533902 | -1.68837 |
| 18 | 0.530002 | 0.302994 |  | 0.530002 | -1.87322 |
| 18.5 | 0.526377 | 0.304227 |  | 0.526377 | -2.06877 |
| 19 | 0.523038 | 0.305822 |  | 0.523038 | -2.27532 |
| 19.5 | 0.519991 | 0.307741 |  | 0.519991 | -2.49316 |
| 20 | 0.517238 | 0.309952 |  | 0.517238 | -2.72259 |
| 20.5 | 0.514778 | 0.312425 |  | 0.514778 | -2.96391 |
| 21 | 0.512605 | 0.315134 |  | 0.512605 | -3.2174 |
| 21.5 | 0.510715 | 0.318058 |  | 0.510715 | -3.48337 |
| 22 | 0.509098 | 0.321174 |  | 0.509098 | -3.7621 |
| 22.5 | 0.507746 | 0.324467 |  | 0.507746 | -4.0539 |
| 23 | 0.506649 | 0.327918 |  | 0.506649 | -4.35904 |
| 23.5 | 0.505795 | 0.331513 |  | 0.505795 | -4.67785 |
| 24 | 0.505174 | 0.33524 |  | 0.505174 | -5.01059 |
| 24.5 | 0.504774 | 0.339085 |  | 0.504774 | -5.35758 |
| 25 | 0.504583 | 0.343037 |  | 0.504583 | -5.7191 |

**Problem 5**

|  |  |  |  |
| --- | --- | --- | --- |
| lambda | Cp,Cd0=0 | Cp,Cd0=.01 | Cp,Cd0=.04 |
| 0.5 | 7.47E-02 | 7.47E-02 | 7.47E-02 |
| 1 | 0.142211 | 0.142086 | 0.141711 |
| 1.5 | 0.202845 | 0.202423 | 0.201158 |
| 2 | 0.257097 | 0.256097 | 0.253097 |
| 2.5 | 0.305408 | 0.303455 | 0.297595 |
| 3 | 0.34821 | 0.344835 | 0.33471 |
| 3.5 | 0.385929 | 0.38057 | 0.364492 |
| 4 | 0.418979 | 0.410979 | 0.386979 |
| 4.5 | 0.447763 | 0.436373 | 0.402201 |
| 5 | 0.47267 | 0.457045 | 0.41017 |
| 5.5 | 0.494076 | 0.473279 | 0.410888 |
| 6 | 0.512338 | 0.485338 | 0.404338 |
| 6.5 | 0.5278 | 0.493472 | 0.390487 |
| 7 | 0.540782 | 0.497907 | 0.369282 |
| 7.5 | 0.551586 | 0.498852 | 0.340649 |
| 8 | 0.560495 | 0.496495 | 0.304495 |
| 8.5 | 0.567766 | 0.491 | 0.260703 |
| 9 | 0.573636 | 0.482511 | 0.209136 |
| 9.5 | 0.578319 | 0.471147 | 0.149632 |
| 10 | 0.582008 | 0.457008 | 8.20E-02 |
| 10.5 | 0.584874 | 0.440171 | 6.06E-03 |
| 11 | 0.587065 | 0.42069 | -7.84E-02 |
| 11.5 | 0.588712 | 0.398603 | -0.171725 |
| 12 | 0.589927 | 0.373927 | -0.274073 |
| 12.5 | 0.590803 | 0.346662 | -0.385759 |
| 13 | 0.59142 | 0.316795 | -0.50708 |
| 13.5 | 0.591842 | 0.284295 | -0.638345 |
| 14 | 0.592122 | 0.249122 | -0.779878 |
| 14.5 | 0.592301 | 0.211223 | -0.932011 |
| 15 | 0.592411 | 0.170536 | -1.09509 |
| 15.5 | 0.592475 | 0.126991 | -1.26946 |
| 16 | 0.592509 | 8.05E-02 | -1.45549 |
| 16.5 | 0.592524 | 3.10E-02 | -1.65354 |
| 17 | 0.592524 | -2.16E-02 | -1.86398 |
| 17.5 | 0.592512 | -7.74E-02 | -2.08718 |
| 18 | 0.592483 | -0.136517 | -2.32352 |
| 18.5 | 0.592434 | -0.199019 | -2.57338 |
| 19 | 0.592356 | -0.265019 | -2.83714 |
| 19.5 | 0.59224 | -0.33462 | -3.1152 |
| 20 | 0.592075 | -0.407925 | -3.40792 |
| 20.5 | 0.591849 | -0.485041 | -3.71571 |
| 21 | 0.59155 | -0.566075 | -4.03895 |
| 21.5 | 0.591164 | -0.651133 | -4.37802 |
| 22 | 0.590676 | -0.740324 | -4.73332 |
| 22.5 | 0.590073 | -0.833755 | -5.10524 |
| 23 | 0.589341 | -0.931534 | -5.49416 |
| 23.5 | 0.588465 | -1.03377 | -5.90047 |
| 24 | 0.58743 | -1.14057 | -6.32457 |
| 24.5 | 0.586222 | -1.25204 | -6.76684 |
| 25 | 0.584826 | -1.3683 | -7.22767 |