| | | | | | | | | 0 | x[0] | | | | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | |
|--|---|--------------------|--------------------|-------|------|---|-------------------|--------------------|-------|------|---|--------|-------------------|-------|------|----|-------|------|----|---|---|----|--------------|----|----|----|----|----|----|--|
| | | | | | | | | 1 | x[1] | | | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| minimize $(1/2)x^TPx + q^Tx$ subject to $Gx \leq h$ | | | | | | | 2 | x[2] | | | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| | | | | | | | | 3 | x[3] | | | 2 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Ax = b | | | | | | | 4 | x[4] | | | 3 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| 120 0 | | | | | | | | 5 | x[5] | | | 4 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | | | | | | | | 6 | x[6] | | | 5 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| x(t) = | $x(t) = x[0] * t^4 + x[1] * t^3 + x[2] * t^2 + x[3] * t + x[4]$ | | | | | | | 7 | x[7] | | | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| $y(t) = x[5] * t^4 + x[6] * t^3 + x[7] * t^2 + x[8] * t + x[9]$ | | | | | | x | 8 | x[8] | | | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| $z(t) = x[10] * t^4 + x[11] * t^3 + x[12] * t^2 + x[13] * t + x[14]$ | | | | | | | | 9 | x[9] | | P | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| phi(t) = $x[15] * t^2 + x[16] * t + x[17]$ | | | | | | | 10 | x[10] | | | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| | | | | | | | | 11 | x[11] | | | 10 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | | | | | | | | 12 | x[12] | | | 11 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | |
| q | Nullvektor | | | | | | | 13 | x[13] | | | 12 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | |
| G | Nullmatrix | | | | | | | 14 | x[14] | | | 13 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | |
| h | Nullvektor | | | | | | | 15 | x[15] | | | 14 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | |
| | | | | | | | | 16 | x[16] | | | 15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | |
| | | | | | | | | 17 | x[17] | | | 16 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | |
| | | | | | | | | | | | | 17 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | | | | | | | | | | | |
| Α | 0 | t[0]4 | t[0]3 | t[0]2 | t[0] | 1 | | | | | | | | | | | | | | | | 0 | 0.x | | | | | | | |
| | 1 | | | | | | t[0]4 | t[0]3 | t[0]2 | t[0] | 1 | | | | | | | | | | | 1 | 0.y | | | | | | | |
| | 2 | | | | | | | | | | | t[0]4 | t[0] ³ | t[0]2 | t[0] | 1 | t[0]² | | | | | 2 | 0.z 0.phi | | | | | | | |
| | 3 | | | | | | | | | | | | | | | | | t[0] | 1 | | | 3 | | | | | | | | |
| | 4 | t[1] ⁴ | t[1]3 | t[1]2 | t[1] | 1 | | | | | | | | | | | | | | | | 4 | 1.x | | | | | | | |
| | 5 | | | | | | t[1] ⁴ | t[1]3 | t[1]2 | t[1] | 1 | | | | | | | | | | | 5 | 1.y | | | | | | | |
| | 6 | | | | | | | | | | | t[1]* | t[1]3 | t[1]2 | t[1] | 1 | | | | | x | 6 | 1.z | | | | | | | |
| | 7 | | | | | | | | | | | | | | | | t[1]2 | t[1] | 1 | | | 7 | 1.phi | | | | | | | |
| | 8 | 4t[0] ³ | 3t[0] ² | 2t[0] | 1 | 0 | | | | | | | | | | | | | | | | 8 | 0.x_dot | | | | | | | |
| | 9 | | | | | | 4t[0]3 | 3t[0]2 | 2t[0] | 1 | 0 | | | | | | | | | | 9 | | 0.y_dot | | | | | | | |
| | 10 | | | | | | | | | | | 4t[0]3 | 3t[0]2 | 2t[0] | 1 | 0 | | | | | | 10 | 0.z_dot | | | | | | | |
| | 11 | 4t[1]3 | 3t[1] ² | 2t[1] | 1 | 0 | | | | | | | | | | | | | | | | 11 | 1.x_dot | | | | | | | |
| | 12 | | | | | | 4t[1]3 | 3t[1] ² | 2t[1] | 1 | 0 | | | | | | | | | | | 12 | 1.y_dot | | | | | | | |
| | 13 | | | | | | | | | | | 4t[1]3 | 3t[1]2 | 2t[1] | 1 | 0 | | | | | | 13 | 1.z dot | | | | | | | |