$$\geq \tag{1}$$

$$\ni \tag{2}$$

$$\propto \tag{3}$$

$$\gg \tag{4}$$

$$x^2 + y^2 = r^2 \tag{5}$$

$$\pm \tag{6}$$

$$\div \tag{7}$$

$$\times \tag{8}$$

$$\star \tag{9}$$

$$\dot{x}, \ddot{x}, \dddot{x}, \ddddot{x} \tag{10}$$

$$x_i, x^2 \tag{11}$$

$$\sum, \sum_{i=1}^{20} \tag{12}$$

$$\frac{\partial y}{\partial x} \tag{13}$$

Updated value $x = x^{\text{low}} + yd$.

$$\begin{array}{ll} \text{Minimize} & f(\boldsymbol{x}) \\ \text{Subject to} & g_i(\boldsymbol{x}) \leq 0; \quad i = 1, \ldots, m \\ & h_k(\boldsymbol{x}) = 0; \quad k = 1, \ldots, p \\ & x_j \geq 0; \qquad j = 1, \ldots, n \end{array}$$

$$\sigma(x) = \begin{cases} e^{\phi xy}\sqrt{x} \, , & \text{if } x \geq 0 \\ 0 \, , & \text{otherwise.} \end{cases} \tag{14}$$

$$\sigma(x) = \begin{cases} e^{\phi xy}\sqrt{x} \, , & \text{if } x \geq 0 \\ 0 \, , & \text{otherwise.} \end{cases} \tag{15}$$

$$\begin{aligned} \sigma(x) &= e^{\phi xy}\sqrt{x} \, , \quad \text{if } x \geq 0 && (16) \\ &= 0 \, , \quad \text{otherwise.} && (17) \end{aligned}$$

$$5x_1 + 2x_2 + 3x_3 - x_4 - 4x_5 + 5x_6 + 7x_7 + 3x_8 - 6x_9 - 2x_{10} - 5x_{11} = 7634 \quad (18)$$

$$f(x, y) = h\left[\frac{1}{2}(x + y) + x^2 + y^3 + \frac{1}{3}z^2\right] \quad (19)$$

$$\begin{aligned} f(x) &= x^3 + 2x^2 - 5x + 10 \\ &= (2)^3 + 2(2)^2 - 5(2) + 10 \\ &= 16 \end{aligned}$$