⑤ $X^{(0)} = (0,0,0)$

$$\begin{cases} 8x_1 + 2x_2 + 3x_3 = 51 \\ 2x_1 + 5x_2 + x_3 = 23 \\ -3x_1 + x_2 + 6x_3 = 20 \end{cases}$$

$$x_1 = \frac{51 - 2x_2 - 3x_3}{8}$$

$$x_2 = \frac{23 - 2x_1 - x_3}{5}$$

$$x_3 = \frac{20 + 3x_1 - x_2}{6}$$

★ Iteração 1: $x_1^1 = \frac{51 - 2.0 - 3.0}{8} \cong 6,375$

$x_2^1 = \frac{23 - 2.6375 - 0}{5} = \frac{10,25}{5} = 2,05$

$x_3^1 = \frac{20 + 3.6,375 - 2,05}{6} = \frac{37,075}{6} \cong 6,1792$

$X^{(1)} = (6,375; 2,050; 6,1792)$

★ Iteração 2: $x_1^2 = \frac{51 - 2.2,05 - 3.6,1792}{8} \cong 3,5453$

$x_2^2 = \frac{23 - 2.3,5453 - 6,1792}{5} = 1,9460$

$x_3^2 = \frac{20 + 3.3,5453 - 1,9460}{6} = 4,7816$

$X^{(2)} = (3,5453; 1,946; 4,7816)$

★ Iteração 3: $x_1^3 = \frac{51 - 2.1,9460 - 3.4,7816}{8} = 4,0953$

$x_2^3 = \frac{23 - 2.4,0953 - 4,7816}{6} = 2,0055$

$x_3^3 = \frac{20 + 3.4,0953 - 2,0055}{6} = 5,0467$

$X^3 = (4,0953; 2,0055; 5,0467)$

spiral