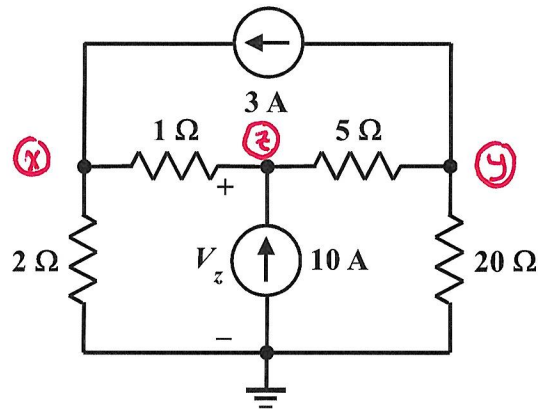Use the nodal analysis method to determine V_z.

$$-3 + \frac{V_x - V_z}{1\Omega} + \frac{V_x}{2\Omega} = 0$$

$$\frac{V_z - V_x}{1\Omega} - 10A + \frac{V_z - V_y}{5\Omega} = 0$$

$$3A + \frac{V_y - V_z}{5\Omega} + \frac{V_y}{20\Omega} = 0$$

In matrix form:

$$\begin{bmatrix} 3/2 & 0 & -1 \\ -1 & -1/5 & 6/5 \\ 0 & 1/4 & -1/5 \end{bmatrix} \begin{bmatrix} 3 \\ 10 \\ -3 \end{bmatrix}$$

Solving,

$$V_z = \frac{\begin{vmatrix} 3/2 & 0 & 3 \\ -1 & -1/5 & 10 \\ 0 & 1/4 & -3 \end{vmatrix}}{\begin{vmatrix} 3/2 & 0 & -1 \\ -1 & -1/5 & 6/5 \\ 0 & 1/4 & -1/5 \end{vmatrix}} = \frac{0.9 - 0.75 - 3.75}{0.06 + 0.25 - 0.45} = \frac{-3.6}{-0.14} \text{ V}$$

$$= 25.7143 \text{ V}$$