12.5, number 25: **Find the equation of the plane through the point** $P_0 = (2, 4, 5)$ **and perpendicular to the line**

$$\begin{cases} x = 5 + t \\ y = 1 + 3t \\ z = 4t. \end{cases}$$

Answer: The line through $(2, 4, 5)$ perpendicular to $\overrightarrow{N} = \overrightarrow{i} + 3\overrightarrow{j} + 4\overrightarrow{k}$ is $(x - 2) + 3(y - 4) + 4(z - 5) = 0$, or

$$\boxed{x + 3y + 4z = 34}.$$