$$
\begin{align*}
& \boldsymbol{F}\{g(x, y)\}=G(\xi, \eta)=\int_{-\infty}^{+\infty} \int_{-\infty}^{+\infty} g(x, y) e^{+j 2 \pi(\xi x+\eta y)} d x d y  \tag{1}\\
& g(x, y)=\int_{-\infty}^{+\infty} \int_{-\infty}^{+\infty} G(\xi, \eta) e^{-j 2 \pi(\xi x+\eta y)} d \xi d \eta=\boldsymbol{F}^{-1}\{G(\xi, \eta)\}  \tag{2}\\
& \boldsymbol{F}\left\{\sum_{k=1}^{N} C_{k} \cdot g_{k}(x, y)\right\}=\sum_{k=1}^{N} C_{k} \cdot G_{k}(\xi, \eta) \tag{3}
\end{align*}
$$

$$
\begin{equation*}
\mathcal{F}\{g(a x, b y)\}=\frac{1}{|a b|} \cdot G\left(\frac{\xi}{a}, \frac{\eta}{b}\right) \tag{4}
\end{equation*}
$$

$$
\begin{equation*}
\mathcal{F}\left\{g\left(x-x_{0}, y-y_{0}\right)\right\}=G(\xi, \eta) \cdot e^{j 2 \pi\left(\xi x_{0}+\eta y_{0}\right)} \tag{5}
\end{equation*}
$$

