

SIFAT TRANSFORMASI FOURIER :

1. Time Shift

$$s(t - t_0) \xleftrightarrow{F} e^{j2\pi f t_0} S(f)$$

2. Frequency Shift

$$S(f - f_0) \xleftrightarrow{F^{-1}} e^{j2\pi f_0 t} s(t)$$

3. Linearitas

$$as_1(t) + bs_2(t) \xleftrightarrow{F} aS_1(f) + bS_2(f)$$

4. Teorema modulasi

$$s(t) \cos 2\pi f_0 t \xleftrightarrow{F} \frac{1}{2} S(f - f_0) + \frac{1}{2} S(f + f_0)$$

5. Time Shift

$$s(at) \xleftrightarrow{F} \frac{1}{a} S\left(\frac{f}{a}\right)$$

6. Frequency scaling

$$S(af) \xleftrightarrow{F^{-1}} \frac{1}{a} s\left(\frac{t}{a}\right)$$