

Assignment - 6

Subj. Mathematical Physics

B.Sc (Non-Math)
Phys)

- * What is Fourier transform.
- * Write the integral formula for Fourier transform.
- * Prove that
$$F\{af_1(m) + bf_2(m)\} = aF_1(s) + bF_2(s)$$
- * Prove that If $F(s)$ is the complex transform of $f(m)$, then prove
$$F\{f(am)\} = \frac{1}{|a|} F(s/a)$$
- * If $F(s)$ is the complex Fourier transform of $f(m)$ then prove
$$F\{f(x-a)\} = e^{-isa} F(s)$$