

MATH 323

Extra Problem for Homework 9

In class, we have seen the formula

$$\mathcal{L}(f') = sF(s) - f(0),$$

where $F(s)$ is the Laplace transform of f .

Use this formula to find a similar formula for $\mathcal{L}(f''')$. You should be writing $\mathcal{L}(f''')$ in terms of $F(s)$, $f(0)$, $f'(0)$, and $f''(0)$.