

7.4.8.

$$L\left\{t^2 te^t\right\} = L\left\{t^2\right\} L\left\{te^t\right\} =$$

$$= \frac{2!}{s^3} \frac{-d}{ds} L\left\{e^t\right\} = \frac{2!}{s^3} \frac{-d}{ds} \frac{1}{s-1} = \frac{2}{s^3} \frac{1}{(s-1)}$$