

## Suggested problems 21

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1. Use the method of Laplace transform to solve each initial value problem

(a)

$$y' + 10y = t^2, \quad y(0) = 0;$$

(b)

$$y'' + 4y' - 5y = 0, \quad y(0) = 5, y'(0) = -1;$$

(c)

$$y'' + 2y' = te^{-t}, \quad y(0) = 6, y'(0) = -1.$$