1. Find the Laplace transform of f(t)= Ae-atu(t)Þ
2. Find the inverse Laplace transform of F(s) = 1/(s + 3)2
3. Given the following differential equation, solve for y(t) if all initial conditions are zero. Use the Laplace transform.
4. Find the Laplace transform of f(t) = te-5t
5. Find the inverse Laplace transform of F(s) = 10/[s(s + 2)(s + 3)2]
6. Find the transfer function of
7. Find the transfer function of
8. Find the transfer function relating the capacitor voltage VC(s) to the input voltage V(s). If L = 2 units, C = 3 units and R = 5 units.



1. Find the transfer function, I2(s)/V(s). Assume value of each component is 1 unit.



1. Find the transfer function, G(s) = X2(s)/F(s), for the translational mechanical system



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