Assignment 4

1. The Laplace transform of the second term of the Duhamel integral is 
\[ \int_{0}^{t} f(t-\tau) \delta(t-\tau) d\tau \]
which is equal to 
\[ f(t) \]

2. The frequency spectrum of the voltage source is 
\[ V(t) \]

3. The Fourier transform of the voltage source is 
\[ V(f) \]

4. The Laplace transform of the voltage source is 
\[ V(s) \]

5. The characteristic spectrum of the voltage source is 
\[ V(f_ch) \]

6. The input impedance of the voltage source is 
\[ Z_in \]

7. The output resistance of the voltage source is 
\[ R_out \]

8. The characteristic spectrum of the current source is 
\[ I(f_ch) \]

9. The input impedance of the current source is 
\[ Z_in \]

10. The output resistance of the current source is 
\[ R_out \]

11. The Laplace transform of the current source is 
\[ I(s) \]

12. The frequency spectrum of the current source is 
\[ I(f) \]

13. The Fourier transform of the current source is 
\[ I(f) \]

14. The characteristic spectrum of the voltage source is 
\[ V(f_ch) \]

15. The input impedance of the voltage source is 
\[ Z_in \]

16. The output resistance of the voltage source is 
\[ R_out \]

17. The characteristic spectrum of the current source is 
\[ I(f_ch) \]

18. The input impedance of the current source is 
\[ Z_in \]

19. The output resistance of the current source is 
\[ R_out \]

20. The Laplace transform of the current source is 
\[ I(s) \]

21. The frequency spectrum of the current source is 
\[ I(f) \]

22. The Fourier transform of the current source is 
\[ I(f) \]

23. The characteristic spectrum of the voltage source is 
\[ V(f_ch) \]

24. The input impedance of the voltage source is 
\[ Z_in \]

25. The output resistance of the voltage source is 
\[ R_out \]