Course › Week 3 › Brownian motion 1: basic theories › Problem (1-2)

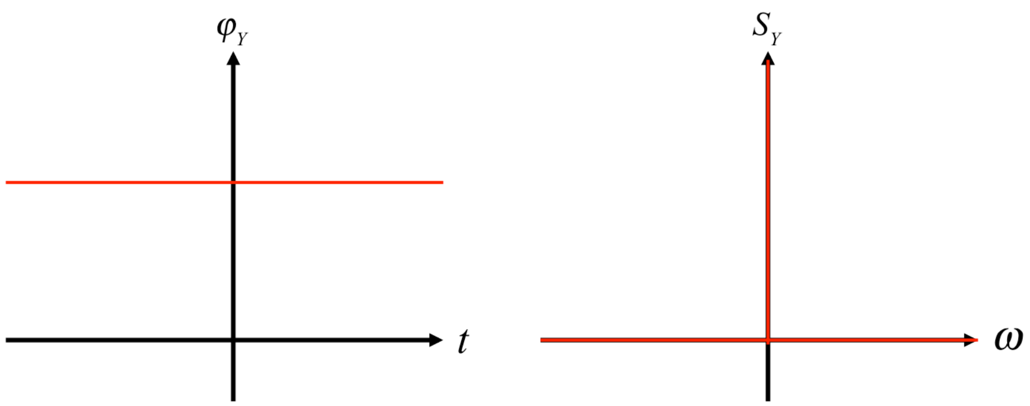
Problem (1-2)

Problem 1

0.0/1.0 point (graded)

Choose the correct combination for the graphs of the spectral density $S_Y(\omega)$ and the auto-correlation function $\varphi_Y(t)$ for a dynamic process $Y(t) = \cos(\omega_1 t)$.

1



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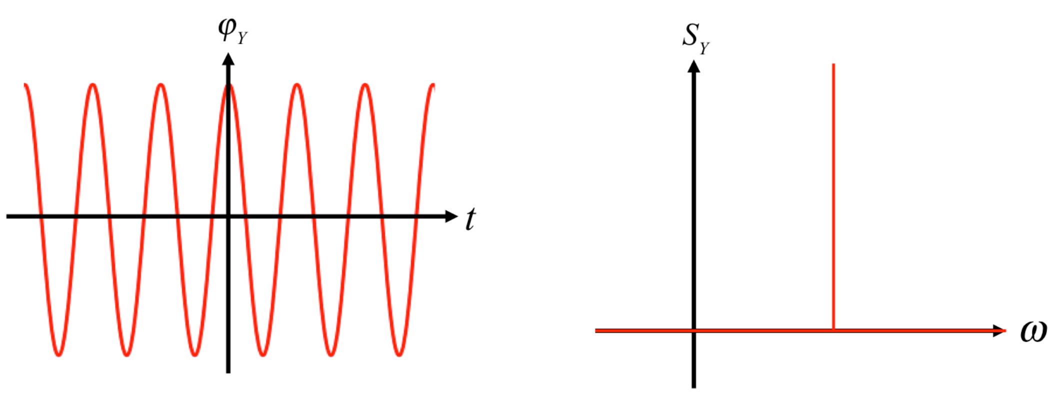

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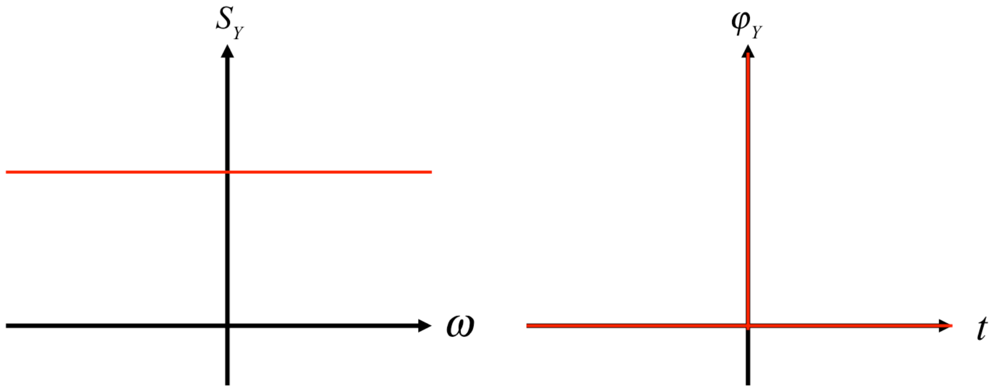

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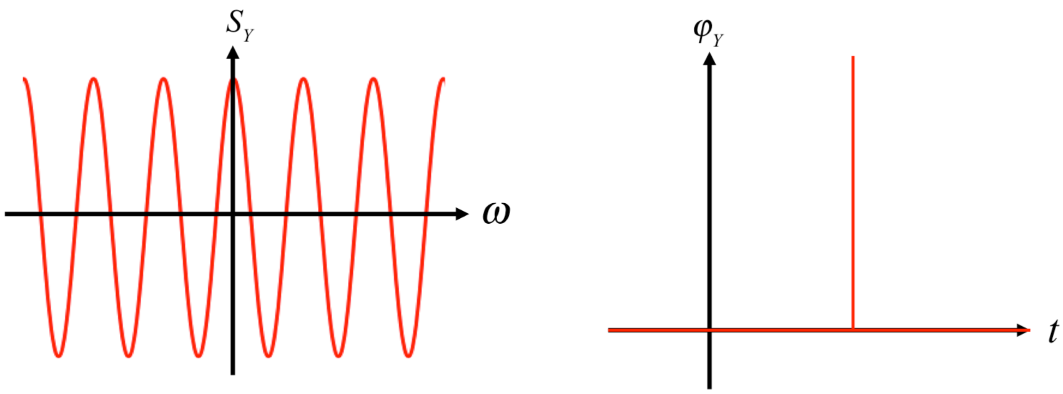


- ◯ 1
- ◯ 2
- ◯ 3
- ◯ 4

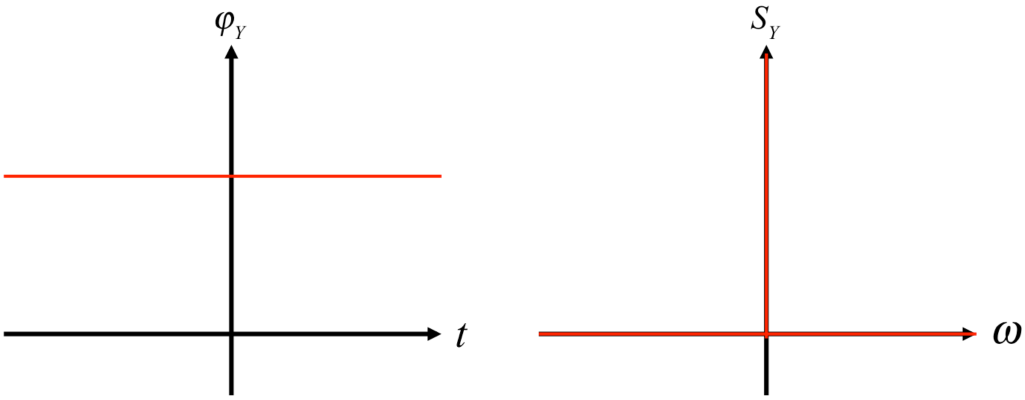
Submit You have used 0 of 2 attempts

Problem 2

0.0/1.0 point (graded)

Choose the correct combination for the graphs of the spectral density $S_Y(\omega)$ and the auto-correlation function$\varphi_Y(t)$ for a dynamic process $Y(t) = \xi(t)$, where $\xi(t)$ is the White noise introduced in Part 1.

1



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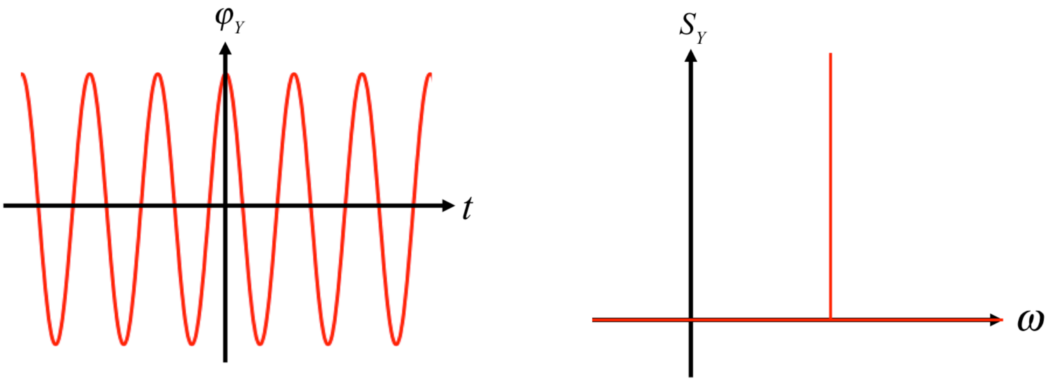

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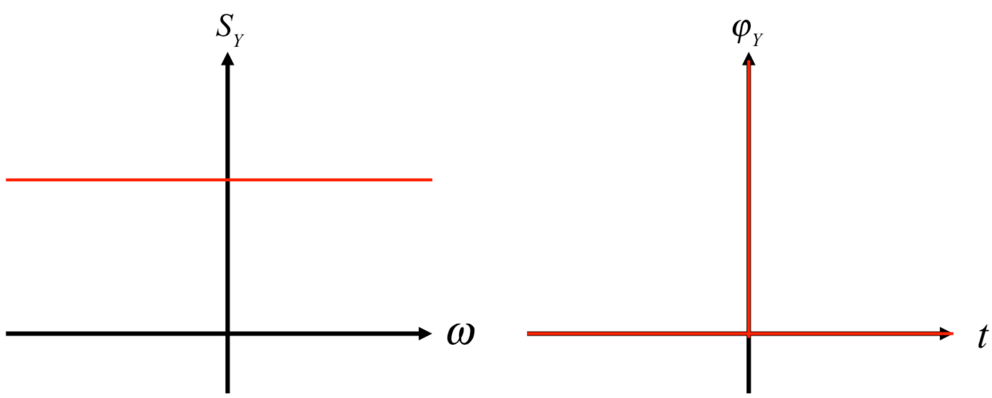
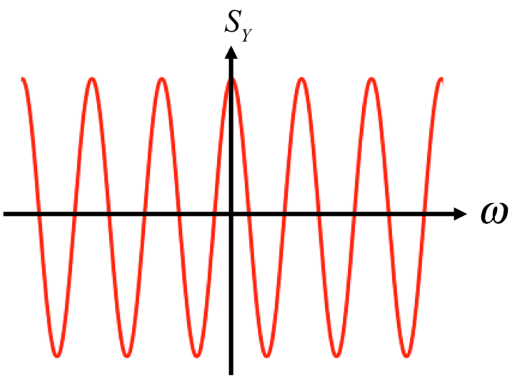
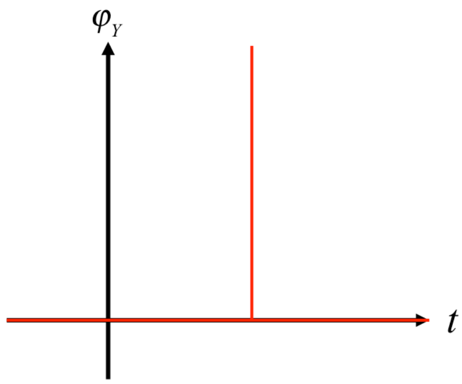


4 



- ◯ 1
- ◯ 2
- ◯ 3
- ◯ 4

Submit You have used 0 of 2 attempts