

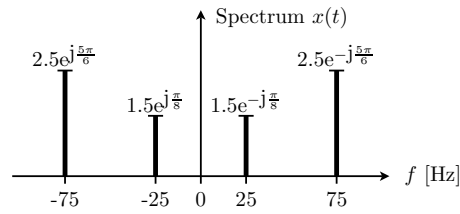
Answers of Exercises

Module Spectrum

Note:

- The symbol [P] in the margin of an exercise denotes there is a pencast available.

Exercise 1



Exercise 2

SPECTRUM	(a)	(b)	(c)	(d)	(e)
FUNDAMENTAL FREQUENCY [Hz]	0.5	1	0.5	1.2	0.6
SIGNAL	(3)	(5)	(1)	(2)	(4)

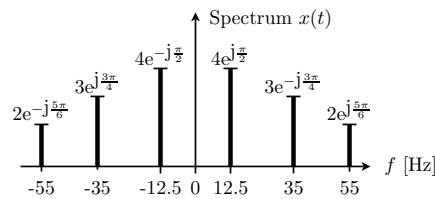
Exercise 3

$$x(t) = 8\sqrt{2} \cos(1000\pi t + \pi/4) + 4 \cos(400\pi t - \pi/2)$$

Exercise 4

[P1]

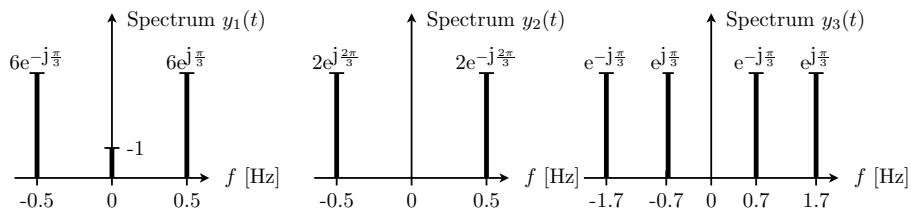
a. .



b.

$$x(t) = 8 \cos(2\pi 12.5t + \frac{\pi}{2}) + 6 \cos(2\pi 35t - \frac{3\pi}{4}) + 4 \cos(2\pi 55t + \frac{5\pi}{6})$$

Exercise 5



Exercise 6

[P2]

