

Keluaran
(dari masukan
 $x(t) = \alpha_1 x_1(t) + \alpha_2 x_2(t)$)

$$\begin{aligned}
 y(t) &= \int (\alpha_1 x_1(t) + \alpha_2 x_2(t)) dt \\
 &= \int \alpha_1 x_1(t) dt + \int \alpha_2 x_2(t) dt \\
 &= \alpha_1 \int x_1(t) dt + \alpha_2 \int x_2(t) dt \\
 &= \alpha_1 y_1(t) + \alpha_2 y_2(t) \text{ [q.e.d]}
 \end{aligned}$$

NEXT:

Modulator Frequency

$$y(t) = A \sin[2\pi (x(t) + f_c)t]$$

Linear atau tidak?

Jawab: Tidak, modulator frekuensi adalah system tak linear.

Modulasi
frekuensi