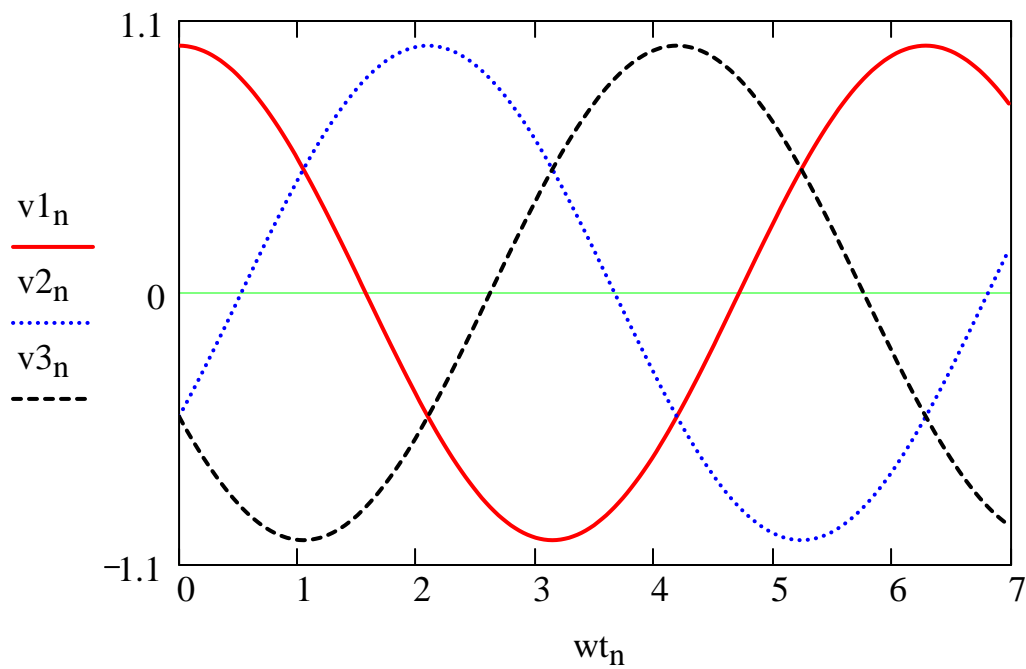


Three-phase voltage & power example

$$n := 0 \dots 200 \qquad \omega t_n := n \cdot \frac{2 \cdot \pi}{180}$$

$$v1_n := 1 \cdot \cos(\omega t_n) \qquad v2_n := 1 \cdot \cos\left(\omega t_n - \frac{2 \cdot \pi}{3}\right)$$

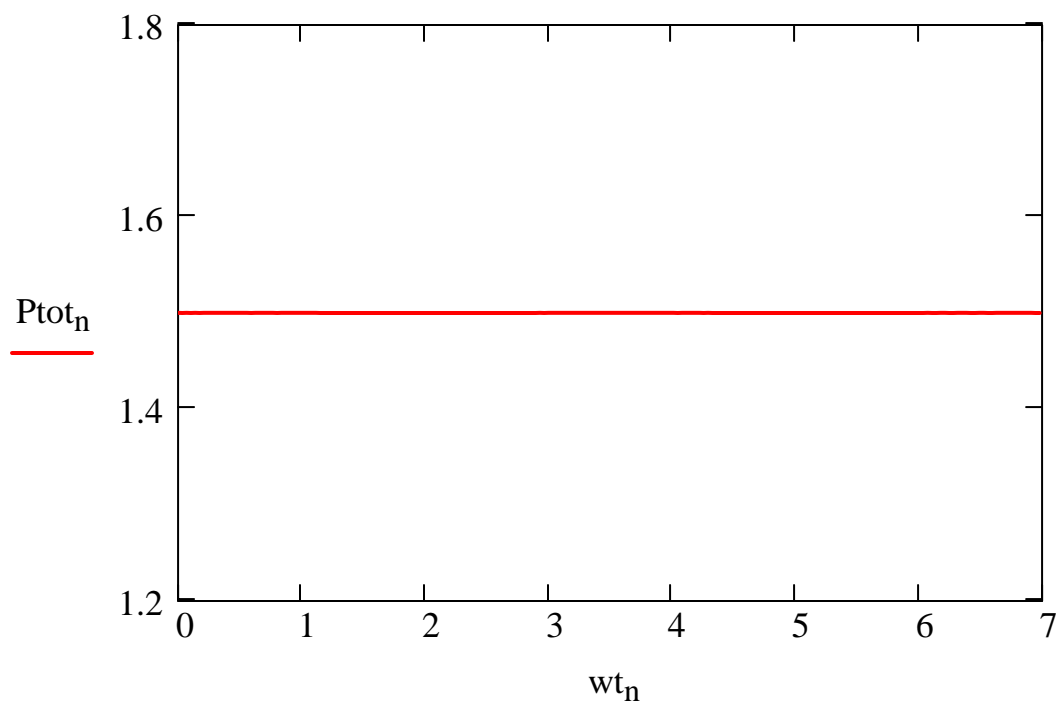
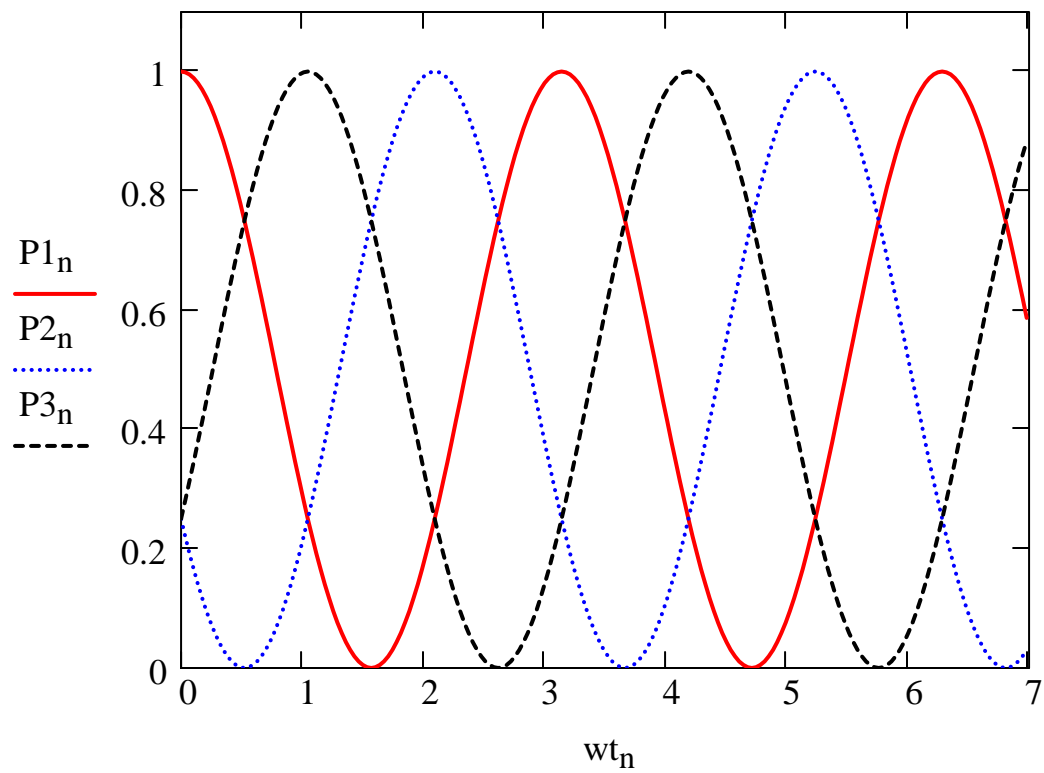
$$v3_n := 1 \cdot \cos\left(\omega t_n - \frac{4 \cdot \pi}{3}\right)$$



Assume each voltage is connected to a 1 ohm resistive load.

$$P1_n := \frac{(v1_n)^2}{1} \qquad P2_n := \frac{(v2_n)^2}{1} \qquad P3_n := \frac{(v3_n)^2}{1}$$

$$P_{tot_n} := P1_n + P2_n + P3_n$$



Note that the total power is constant with respect to time.