

$$y(n) = x(n) \cos(2\pi f n / F_s)$$

$$\omega = 2\pi f / F_s$$

$$y(n) = x(n) \cos(n\omega)$$

$$\theta = 0$$

for $n = 0, 1, 2,$

$$y(n) = x(n) \cos(\theta)$$

$$\theta = \theta + \omega$$

end