a)

ω (vinkel frekvens) $= 2$

T (period) $= \dfrac{2\pi}{\omega} = \pi$

f (frekvens) $= \dfrac{1}{T} = 1/\pi \ Hz$

b)

$\omega = 100\pi$

$T = \dfrac{2\pi}{\omega} = \dfrac{1}{50}$

$f = 50 \ Hz$