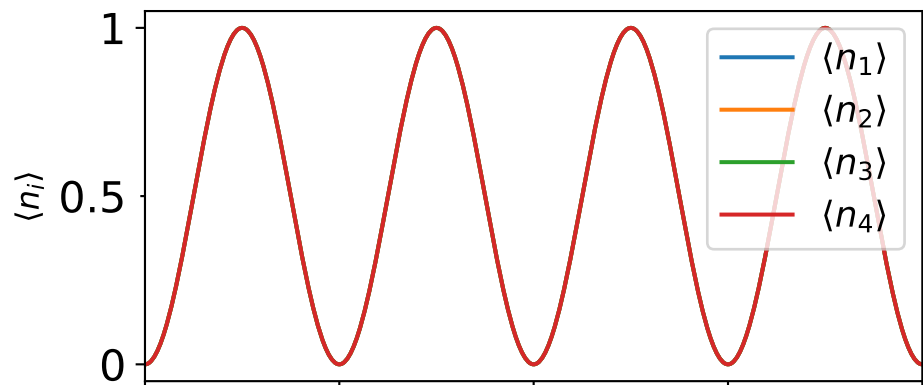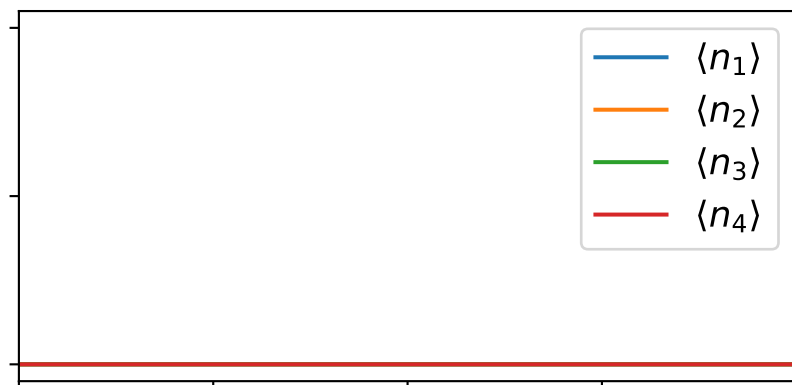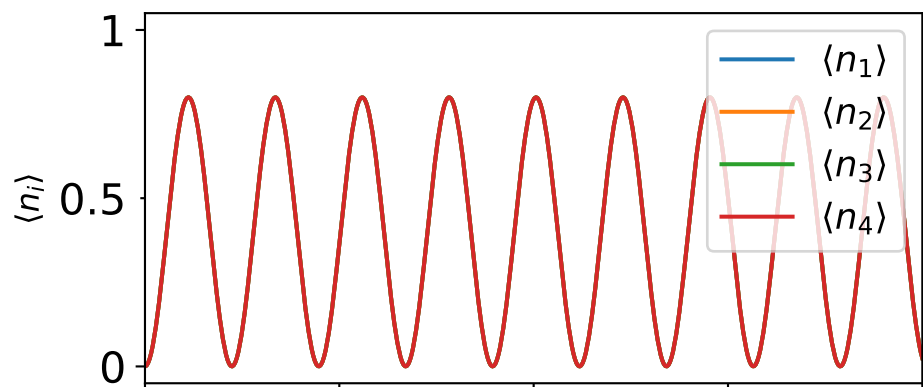Initial state |0000⟩

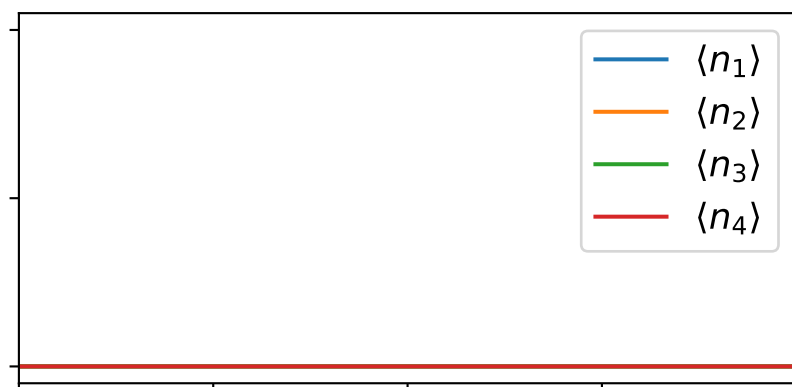a) $\varepsilon = 0$, $t = \Delta$, $t_c = 0.0$, $\varphi = 0$

b) $\varepsilon = 0$, $t = \Delta$, $t_c = 0.0$, $\varphi = \pi$
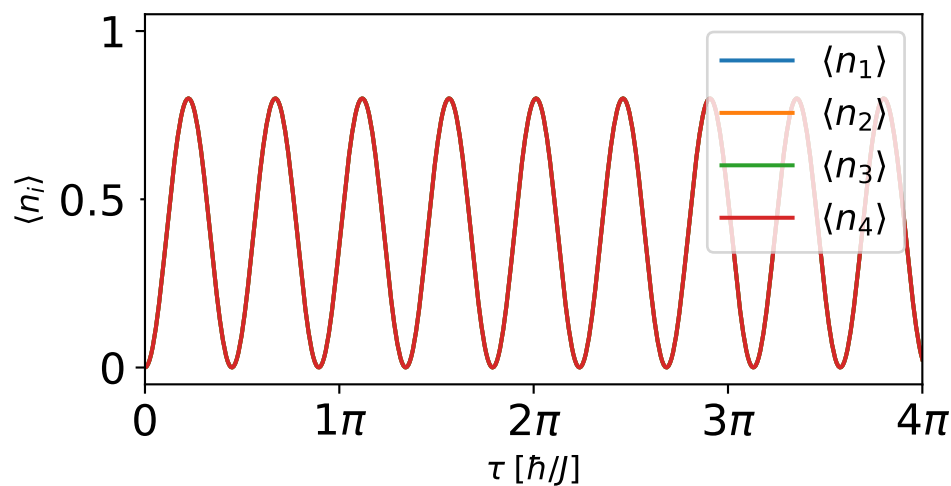
c) $\varepsilon = 1$, $t = 1$, $\Delta = 2$, $t_c = 0.0$, $\varphi = 0$

d) $\varepsilon = 1$, $t = 1$, $\Delta = 2$, $t_c = 0.0$, $\varphi = \pi$

e) $\varepsilon = 1$, $t = 1$, $\Delta = -1$, $t_c = 0.0$, $\varphi = 0$

f) $\varepsilon = 1$, $t = 1$, $\Delta = -1$, $t_c = 0.0$, $\varphi = \pi$

$\langle n_1 \rangle$, $\langle n_2 \rangle$, $\langle n_3 \rangle$, $\langle n_4 \rangle$

$\langle n_i \rangle$

$\tau \; [\hbar/J]$