Section 1:

3) $C_1 = \frac{\sin(\frac{1\pi}{2})}{1\pi} = \frac{\sin(\frac{\pi}{2})}{\pi}$

$\sin(\frac{\pi}{2}) = 1$ $= \boxed{\frac{1}{\pi}}$

Section 3:

1) a. $c_m = \frac{1}{T_0}\left(\int_{-0.25ms+tp}^{0.25ms+tp} e^{-jm\omega_0 t}\,dt + \int_{0.25ms+tp}^{0.75ms+tp} 0\right)$

b. $c_m = \frac{1}{7E-3}\left(\frac{e^{jm\omega_0 t(0.25ms+tp)}}{-jm\omega_0 t} - \frac{e^{jm\omega_0 t(-0.25ms+tp)}}{-jm\omega_0 t}\right)$

d. $c_m = \frac{1}{-jm2\pi}\left(e^{jm2\pi(0.25)} - e^{-jm2\pi(0.25)}\right)e^{-jm\omega_0 tp}$

e. $c_m = \frac{1}{m\pi}\left(\frac{e^{jm\pi/2} - e^{-jm\pi/2}}{2j}\right)e^{-jm\omega_0 tp}$

f. $c_m = \frac{\sin(\pi m/2)}{\pi m}$ Figure 1

$c_m = \frac{\sin(\pi m/2)}{\pi m} e^{jm\omega_0 tp}$ Figure 4

The difference is the delay, which isn't included in Figure 1 but in Figure 4 represented by $e^{-jm\omega_0 tp}$