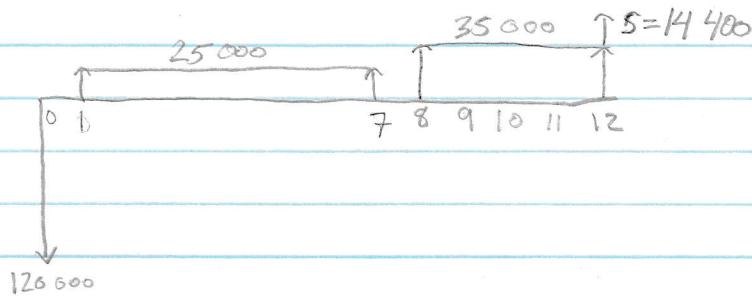


1)



$t = 0.45$, tax rate
 $d = 0.20$, depreciation rate
 $i = 0.08$, after tax MARR

$$CTF = 1 - \frac{td(1+i/2)}{(i+d)(i+1)} = 1 - \frac{0.45(0.20)(1+0.08/2)}{(0.08+0.20)(0.08+1)} = 0.6905$$

$$CTF = 0.6905$$

$$CSF = 1 - \frac{td}{(i+d)} = 1 - \frac{0.45(0.20)}{(0.08+0.20)} = 0.6786$$

$$CSF = 0.6786$$

$$PW = -120K \cdot CTF + [25K \left(\frac{P}{A}, 8\%, 7\right) + 35K \left(\frac{P}{A}, 8\%, 5\right) \left(\frac{P}{F}, 8\%, 7\right)](1-t) + 14400 \cdot CSF \left(\frac{P}{F}, 8\%, 12\right)$$

$$= -120K(0.6905) + [25K(5.2064) + 35K(3.9927)(0.5835)](1-0.45) + 14400(0.6786) \times (0.3971)$$

$$PW = \$37458.03$$

$$AW = 37458.03 \left(\frac{A}{P}, 8\%, 12\right)$$

$$= 37458.03(0.1327)$$

$$AW = \$4970.68$$

The annual worth for the project is $\boxed{\$4970.68}$
 Since the $AW > 0$ this is a good project to proceed with.