

Per form a PW analysis to determine which machine of the 3 below should be bought. Assume equal service (i.e. same revenue). MARR = 10%.

M/C

	Electric	Gas	Solar
First cost	\$2,500	\$3,500	\$6,000
Ad	\$900	\$700	\$50
Salvage	\$200	\$350	\$100
Life	5 years	5 years	5 years

$$\begin{aligned}
 PW_E &= -2,500 - 900(P/A, 10\%, 5) + 200(P/F, 10\%, 5) \\
 &= -2,500 - \frac{900}{0.11} (1 - 1.1^{-5}) + 200 \times 1.1^{-5} \\
 &= -\$5,787.52
 \end{aligned}$$

$$\begin{aligned}
 PW_G &= -3,500 - 700(P/A, 10\%, 5) + 350(P/F, 10\%, 5) \\
 &= -\$5,936.23
 \end{aligned}$$

$$\begin{aligned}
 PW_S &= -6,000 - 50(P/A, 10\%, 5) + 100(P/F, 10\%, 5) \\
 &= -\$6,127
 \end{aligned}$$

↳ Buy Electric m/c