

$$1.) \quad \$500 = R \cdot \frac{1 - \left(1 + \frac{0.0625}{12}\right)^{-60}}{\frac{0.0625}{12}} \quad \begin{array}{l} 12 * 5 \\ = 60 \end{array}$$

$$\begin{array}{r} \underline{\$500} = R \cdot 51.4158 \dots \\ 51.4158 \dots \quad \underline{51.4158} \dots \end{array}$$

$$R = \$106.97$$

$$\begin{array}{r} 106.97 \\ * 60 \\ \hline \$6418.20 \end{array}$$

$$2.) \quad A = 150 \cdot \frac{1 - \left(1 + \frac{0.0575}{12}\right)^{-36}}{\frac{0.0575}{12}} \quad \begin{array}{l} 3 * 12 \\ = 36 \end{array}$$

$$A = 150 \cdot \frac{0.1580949466}{\frac{0.0575}{12}}$$

$$A = \$4949.06$$

\$150,000

$150,000 \times 0.2 = \$30,000$ down payment

$\$150,000 - 30,000 = \$120,000$ loan

$$120,000 = R \cdot \frac{1 - \left(1 + \frac{0.055}{12}\right)^{-360}}{\frac{0.055}{12}} \quad 30\% / 12 = 360$$

$$R = \$681.35$$

$$681.35 \times 360 = \$245,286$$