

PRACTICE PROBLEMS

1. In a housing project the following sequence of events occurs.
 - At the start of the project (time zero), **land is bought at \$1,000,000**
 - **Two months** later, **\$100,000 is paid to the architect** for preparing the design
 - **In month 4**, construction is started and the cost of construction (labor and material) is **\$150,000 per month**
 - **Every month**, one house is built (a total of 12 houses); the **first one is ready for sale in month 6**
 - During **every month starting from month 8**, one house is sold for a **price of \$150,000 each**
 - After all of the houses are built and before all are sold, the **cost of maintaining the site is \$10,000 per month**

Draw the cash flow diagram and find the **equivalence** at the beginning period (zero period)

2. 2-Mr. Shop **purchases a pizza shop for \$120,000**. Its operation will result in a **net income of \$15,000/Yr for the first year, increasing by \$2,000** each year after year 1. **At the end of the fifth year, the shop is sold for \$155,000**. Draw the cash flow diagram for this project. find the equivalence at the end of **tenth** year!
3. Mr. X **deposited \$1,500** in a savings account at the local bank and went on assignment overseas. **After two years**, he returned and noticed he had **\$1,800 in his account**. What annual **effective** rates of interest had the bank given him if they compounded the interest **quarterly**? What if they compounded **annually**?
4. What is **the yearly depreciation** and the book value for a truck with an **initial cost of \$150,000**, an assumed life of five years, and an **expected resale value of \$50,000**?