

MORTGAGE OR CAR LOAN



AMORTIZATION SCHEDULES



YOU BOUGHT A CAR!

- ❖ Negotiated total price is \$25,920
- ❖ Get a 4-year loan, 9% loan
 - ❖ Pay in annual payments
- ❖ What's your payment?
 - ❖ \$25,920 is the Present Value of the Car
 - ❖ Need to find the payment (annuity)
- ❖ $\$25,920 = 3.240 * \text{Payment}$
 - ❖ Solve for the Payment
 - ❖ $\$25,920 / 3.24 = \$8,000$ per payment

Present Value of Annuity			
Payments	8%	9%	10%
1	0.926	0.917	0.909
2	1.783	1.759	1.736
3	2.577	2.531	2.487
4	3.312	3.240	3.170



AMORTIZATION (PAYMENT) SCHEDULE

Amortization Table				
Period	Payment	Interest	Principal	Loan Value
-				25,920.00 X .09
1	8,000.00	2,332.80	= 5,667.20	= 20,252.80 X .09
2	8,000.00	1,822.75	6,177.25	14,075.55
3	8,000.00			
4	8,000.00			



COMPLETED TABLE

Amortization Table				
Period	Payment	Interest	Principal	Loan Value
-				25,920.00
1	8,000.00	2,332.80	5,667.20	20,252.80
2	8,000.00	1,822.75	6,177.25	14,075.55
3	8,000.00	1,266.80	6,733.20	7,342.35
4	8,000.00	657.65 6,680.81	7,342.35 7,359.19	0.00 3.16



JOURNAL ENTRIES

Amortization Table				
Period	Payment	Interest	Principal	Loan Value
-				25,920.00
1	8,000.00	2,332.80	5,667.20	20,252.80
2	8,000.00	1,822.75	6,177.25	14,075.55
3	8,000.00	1,266.80	6,733.20	7,342.35
4	8,000.00	657.65	7,342.35	0.00

Journal Entry for First Payment

Interest Expense	2,332.80	
Car Loan Payable	5,667.20	
	Cash	8,000



MONTHLY PAYMENTS

❖ Total price is: \$25,920; 4-year loan @12%;

❖ Pay monthly

❖ Number of payments = $4 * 12 = 48$ payments

❖ Compounding rate = $\frac{12\%}{12 \text{ months}} = 1\%$

❖ Which table? PV of Annuity 1%, 48 payments

❖ $\$25,920 = 37.974 * ??$

❖ $\frac{25,920}{37.974} = 682.57 \text{ per month}$





**NOW
YOU
KNOW**

