Activity 2.4: What is the Average Payment?

HIGH SCHOOL FINANCIAL PLANNING PROGRAM
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NAME: **DATE:**

Directions:

Figure out the average monthly payments for two purchases made with loans using the amortization calculation formula.

Alternatives: Do your own amortization calculations using spreadsheet software* or generate an amortization payment chart by using an online financial calculator.

Amortization Calculation Formula

$$A = P\frac{r(1+r)^n}{(1+r)^n - 1}$$

A = payment amount

P (aka ***pv***) = principal (the present value of the loan)

r = interest rate, per period (decimal number)

n = total number of payments over which the loan will be repaid

Description	Present Value of Loan (pv)	Annual Interest Rate (APR)	Interest Rate Per Period (r)	Number of Payments (n)	Payment Amount (A)	Total Amount to be Repaid
Cash Loan	$100	40.0%	40% / 12 = $3.33%	6	$18.66	$18.66 x 6 = $111.96
Big-Screen TV	$700	7.0%	7% / 12 = $	24	$	$
College Loan	$12,000	3.5%	3.5% / 12 = $	180	$	$

*Microsoft Excel PMT Function: =PMT(r,n,-pv)

PMT Function example for cash loan: =PMT(.4/12,6,-100)