

FIXED PAYMENT LOANS

$$PV = L = \$5,000$$

$$n = 5 \text{ [years]}$$

$$r = 9\% \text{ per period [year]}$$

$$\text{payment} = C = -\$1,285.46.$$

Calculator :

$$N = 5$$

$$i/y = 9$$

$$PV = +5,000 \text{ [borrower]}$$

$$FV = 0$$

CPT PMT

FIXED PAYMENT LOAN

Period	BB	Pymt = Int. + Princ.			EB
0					5,000
1	5,000	1,285.46	$5,000 \cdot 9\%$ $= 450.00$	835.46	$5,000 - 835.46$ $= 4,164.54$
2	4,164.54	1,285.46	$4,164.54 \cdot 9\%$ $= 374.81$	910.65	$4,164.54 - 910.65$ $= 3,253.89$
3	3,253.89	

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K	BB	C	BB · r	C - BB · r	$BB - (C - BB \cdot r)$ $= BB(1+r) - C$
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VARIABLE PAYMENT LOAN.

$$PV = L = \$5,000$$

$$n = 5 \text{ [years]}$$

$$r = 9\% \text{ per period [year]}$$

$$\text{payment} \begin{cases} \text{principal paydown} = \text{fixed} = \frac{\$5,000}{5} \\ \text{interest} \end{cases}$$

VARIABLE PAYMENT LOAN

paid down

Period	BB	PYMT =	$\overbrace{\text{int} + \text{Princ.}}^{\text{paid down}}$	EB
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0

5,000

1

5,000

1,450.00

$5,000 \cdot 9\%$
= 450.00

1,000

4,000

2

4,000

1,360.00

$4,000 \cdot 9\%$
= 360.00

1,000

3,000

...

K

BB

$BB \cdot r + \frac{PV}{t}$

$BB \cdot r$

$\frac{PV}{t}$

"t = n"

$BB - \frac{PV}{t}$

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