

EJEMPLO

CREDITO HIPOTECARIO TECHO PROPIO

EJEMPLO : CREDITO TECHO PROPIO DE S/. 30,000 A 15 AÑOS

Una persona desea financiar una vivienda de S/. 30,000, bajo el programa Techo Propio, el cual otorga un Bono Familiar Habitacional (BFH) de S/. 17,750 al inicio del credito, que permite reducir el monto a financiar, el requisito es un 3% de inicial sobre el Valor de la Vivienda.

VALOR DE LA VIVENDA	S/. 30,000.00
INICIAL 10% (-)	S/. 900.00
SUB TOTAL	S/. 29,100.00
BONO FAMILIAR HABITACIONAL (-)	S/. 17,750.00
MONTO TOTAL FINANCIADO	S/. 11,350.00

PARAMETROS Y CONDICIONES DEL FINANCIAMIENTO

TEA (*)	VENCIMIENTO	N° DE CUOTAS	TEM (**)	TCEA (***)
19.56%	15 AÑOS	180	1.50%	3.27%
SEG. DESGRAV. UNICO (1)	SEG. DESGRAV. MANCOMUNADO	SEG. DEL BIEN (2)	PORTES	VALOR CUOTA
0.050%	0.100%	0.0281%	S/. 8.00	S/. 204.12

(*) TEA = Tasa Efectiva Anual (**) TEM = Tasa Efectiva Mensual (***) TCEA = Tasa Costo Efectiva Anual

(1) El seguro de Desgravamen se aplica multiplicando la tasa indicada por el saldo insoluto mensual (saldo inicial) El porcentaje a utilizar es si el credito es para una persona unica o una pareja (mancomunado)

(2) El Seguro del Bien se calcula multiplicando el porcentaje indicado por el Valor de Edificación del inmueble. Los gastos de los Seguros (1) Y (2) se cobran de manera mensual, y forma parte del monto total de la cuota.

FORMULA PARA EL CALCULO DEL VALOR DE LA CUOTA

El valor de la cuota incluye una parte de capital, de interes, el seguro de desgravamen, el seguro del bien y los portes.

El interes y el seguro de desgravamen son tasas porcentuales que multiplican al saldo inicial de cada mes, por lo que podemos sumarlos para tener la tasa de interes efectiva que se pueda aplicar en la siguiente formula:

Valor Cuota = Incluye Parte del capital de la cuota + parte del interes de la cuota + seguro de desgravamen

$$\text{Valor Cuota} = \text{Monto a Financiar} \times \frac{[(\text{TEM} + \text{Tasa Seg. Desg.}) \times (1 + \text{TEM} + \text{Tasa Seg. Desg.})^n]}{[(1 + \text{TEM} + \text{Tasa Seg. Desg.})^n - 1]}$$

DONDE: n = N° DE CUOTAS

Seguro del Bien = Valor de la Vivienda x Tasa Seguro del Bien

Cuota a Pagar = Valor Cuota + Seguro del Bien + Portes

A continuacion hallaremos los datos contenidos para estas formulas:

FORMULA PARA EL CALCULO DE LA TASA DE INTERES EFECTIVA DEL PERIODO DE LA TASA EFECTIVA ANUAL

$$\begin{aligned} \text{TEM} &= (1 + \text{TEA})^{(1/12)} - 1 \\ \text{TEM} &= (1 + 19.56\%)^{(1/12)} - 1 \\ \text{TEM} &= 1.50\% \end{aligned}$$

La Tasa de Seguro de desgravamen para una persona unica el cual utilizaremos es :

$$\text{Tasa Seg. Desg.} = 0.05\%$$

El numero de cuotas (n) n = 180 meses

Reemplazamos los valores en la formula Valor Cuota:

$$\text{Valor Cuota} = S/. 11,350 \times \frac{[(1.50\% + 0.05\%) \times (1 + 1.50\% + 0.05\%)^{180}]}{[(1 + 1.50\% + 0.05\%)^{180} - 1]}$$

Valor Cuota = S/. 187.69

calcularemos el Seguro del Bien:

$$\text{Seguro del Bien} = \text{Valor de la Vivienda} \times \text{Tasa Seguro del Bien}$$

$$\text{Seguro del Bien} = S/. 30,000 \times 0.0281\%$$

$$\text{Seguro del Bien} = S/. 8.43$$

Finalmente calcularemos la Cuota a pagar

$$\text{Cuota a Pagar} = \text{Valor Cuota} + \text{Seguro del Bien} + \text{Portes}$$

$$\text{Cuota a Pagar} = S/. 187.69 + S/. 8.43 + S/. 8.00$$

$$\text{Cuota a Pagar} = S/. 204.12$$

CRONOGRAMA DE PAGOS

N°	CAPITAL	AMORTIZACION	INTERES	SEG. DESGRAV.	SEG. DEL BIEN	PORTES	VALOR CUOTA
0	S/. 11,350.00	0	0	0	0	0	0
1	S/. 11,338.22	S/. 11.78	S/. 170.24	S/. 5.68	S/. 8.43	S/. 8.00	S/. 204.12
2	S/. 11,326.26	S/. 11.96	S/. 170.06	S/. 5.67	S/. 8.43	S/. 8.00	S/. 204.12
3	S/. 11,314.11	S/. 12.15	S/. 169.88	S/. 5.66	S/. 8.43	S/. 8.00	S/. 204.12
4	S/. 11,301.77	S/. 12.34	S/. 169.70	S/. 5.66	S/. 8.43	S/. 8.00	S/. 204.12
5	S/. 11,289.24	S/. 12.53	S/. 169.51	S/. 5.65	S/. 8.43	S/. 8.00	S/. 204.12
6	S/. 11,276.52	S/. 12.72	S/. 169.32	S/. 5.64	S/. 8.43	S/. 8.00	S/. 204.12
7	S/. 11,263.60	S/. 12.92	S/. 169.13	S/. 5.64	S/. 8.43	S/. 8.00	S/. 204.12
8	S/. 11,250.48	S/. 13.12	S/. 168.94	S/. 5.63	S/. 8.43	S/. 8.00	S/. 204.12
9	S/. 11,237.16	S/. 13.32	S/. 168.74	S/. 5.63	S/. 8.43	S/. 8.00	S/. 204.12
10	S/. 11,223.63	S/. 13.53	S/. 168.54	S/. 5.62	S/. 8.43	S/. 8.00	S/. 204.12
11	S/. 11,209.89	S/. 13.74	S/. 168.34	S/. 5.61	S/. 8.43	S/. 8.00	S/. 204.12
12	S/. 11,195.94	S/. 13.95	S/. 168.13	S/. 5.60	S/. 8.43	S/. 8.00	S/. 204.12
13	S/. 11,181.77	S/. 14.17	S/. 167.92	S/. 5.60	S/. 8.43	S/. 8.00	S/. 204.12
14	S/. 11,167.39	S/. 14.39	S/. 167.71	S/. 5.59	S/. 8.43	S/. 8.00	S/. 204.12
15	S/. 11,152.78	S/. 14.61	S/. 167.50	S/. 5.58	S/. 8.43	S/. 8.00	S/. 204.12
16	S/. 11,137.94	S/. 14.84	S/. 167.28	S/. 5.58	S/. 8.43	S/. 8.00	S/. 204.12
17	S/. 11,122.87	S/. 15.07	S/. 167.05	S/. 5.57	S/. 8.43	S/. 8.00	S/. 204.12
18	S/. 11,107.57	S/. 15.30	S/. 166.83	S/. 5.56	S/. 8.43	S/. 8.00	S/. 204.12
19	S/. 11,092.03	S/. 15.54	S/. 166.60	S/. 5.55	S/. 8.43	S/. 8.00	S/. 204.12
20	S/. 11,076.26	S/. 15.78	S/. 166.37	S/. 5.55	S/. 8.43	S/. 8.00	S/. 204.12
21	S/. 11,060.23	S/. 16.02	S/. 166.13	S/. 5.54	S/. 8.43	S/. 8.00	S/. 204.12
22	S/. 11,043.96	S/. 16.27	S/. 165.89	S/. 5.53	S/. 8.43	S/. 8.00	S/. 204.12
23	S/. 11,027.44	S/. 16.52	S/. 165.65	S/. 5.52	S/. 8.43	S/. 8.00	S/. 204.12
24	S/. 11,010.66	S/. 16.78	S/. 165.40	S/. 5.51	S/. 8.43	S/. 8.00	S/. 204.12

25	S/. 10,993.62	S/. 17.04	S/. 165.15	S/. 5.51	S/. 8.43	S/. 8.00	S/. 204.12
26	S/. 10,976.32	S/. 17.30	S/. 164.89	S/. 5.50	S/. 8.43	S/. 8.00	S/. 204.12
27	S/. 10,958.74	S/. 17.57	S/. 164.63	S/. 5.49	S/. 8.43	S/. 8.00	S/. 204.12
28	S/. 10,940.90	S/. 17.84	S/. 164.37	S/. 5.48	S/. 8.43	S/. 8.00	S/. 204.12
29	S/. 10,922.78	S/. 18.12	S/. 164.10	S/. 5.47	S/. 8.43	S/. 8.00	S/. 204.12
30	S/. 10,904.38	S/. 18.40	S/. 163.83	S/. 5.46	S/. 8.43	S/. 8.00	S/. 204.12
31	S/. 10,885.69	S/. 18.69	S/. 163.55	S/. 5.45	S/. 8.43	S/. 8.00	S/. 204.12
32	S/. 10,866.71	S/. 18.98	S/. 163.27	S/. 5.44	S/. 8.43	S/. 8.00	S/. 204.12
33	S/. 10,847.44	S/. 19.27	S/. 162.99	S/. 5.43	S/. 8.43	S/. 8.00	S/. 204.12
34	S/. 10,827.87	S/. 19.57	S/. 162.70	S/. 5.42	S/. 8.43	S/. 8.00	S/. 204.12
35	S/. 10,808.00	S/. 19.87	S/. 162.40	S/. 5.41	S/. 8.43	S/. 8.00	S/. 204.12
36	S/. 10,787.82	S/. 20.18	S/. 162.11	S/. 5.40	S/. 8.43	S/. 8.00	S/. 204.12
37	S/. 10,767.33	S/. 20.49	S/. 161.80	S/. 5.39	S/. 8.43	S/. 8.00	S/. 204.12
38	S/. 10,746.52	S/. 20.81	S/. 161.50	S/. 5.38	S/. 8.43	S/. 8.00	S/. 204.12
39	S/. 10,725.38	S/. 21.13	S/. 161.18	S/. 5.37	S/. 8.43	S/. 8.00	S/. 204.12
40	S/. 10,703.92	S/. 21.46	S/. 160.87	S/. 5.36	S/. 8.43	S/. 8.00	S/. 204.12
41	S/. 10,682.13	S/. 21.79	S/. 160.55	S/. 5.35	S/. 8.43	S/. 8.00	S/. 204.12
42	S/. 10,660.00	S/. 22.13	S/. 160.22	S/. 5.34	S/. 8.43	S/. 8.00	S/. 204.12
43	S/. 10,637.52	S/. 22.47	S/. 159.89	S/. 5.33	S/. 8.43	S/. 8.00	S/. 204.12
44	S/. 10,614.70	S/. 22.82	S/. 159.55	S/. 5.32	S/. 8.43	S/. 8.00	S/. 204.12
45	S/. 10,591.52	S/. 23.18	S/. 159.21	S/. 5.31	S/. 8.43	S/. 8.00	S/. 204.12
46	S/. 10,567.99	S/. 23.54	S/. 158.86	S/. 5.30	S/. 8.43	S/. 8.00	S/. 204.12
47	S/. 10,544.09	S/. 23.90	S/. 158.51	S/. 5.28	S/. 8.43	S/. 8.00	S/. 204.12
48	S/. 10,519.82	S/. 24.27	S/. 158.15	S/. 5.27	S/. 8.43	S/. 8.00	S/. 204.12
49	S/. 10,495.17	S/. 24.65	S/. 157.78	S/. 5.26	S/. 8.43	S/. 8.00	S/. 204.12
50	S/. 10,470.14	S/. 25.03	S/. 157.41	S/. 5.25	S/. 8.43	S/. 8.00	S/. 204.12
51	S/. 10,444.72	S/. 25.42	S/. 157.04	S/. 5.24	S/. 8.43	S/. 8.00	S/. 204.12
52	S/. 10,418.91	S/. 25.81	S/. 156.66	S/. 5.22	S/. 8.43	S/. 8.00	S/. 204.12
53	S/. 10,392.70	S/. 26.21	S/. 156.27	S/. 5.21	S/. 8.43	S/. 8.00	S/. 204.12
54	S/. 10,366.08	S/. 26.62	S/. 155.88	S/. 5.20	S/. 8.43	S/. 8.00	S/. 204.12
55	S/. 10,339.05	S/. 27.03	S/. 155.48	S/. 5.18	S/. 8.43	S/. 8.00	S/. 204.12
56	S/. 10,311.61	S/. 27.45	S/. 155.07	S/. 5.17	S/. 8.43	S/. 8.00	S/. 204.12
57	S/. 10,283.73	S/. 27.87	S/. 154.66	S/. 5.16	S/. 8.43	S/. 8.00	S/. 204.12
58	S/. 10,255.43	S/. 28.31	S/. 154.24	S/. 5.14	S/. 8.43	S/. 8.00	S/. 204.12
59	S/. 10,226.68	S/. 28.74	S/. 153.82	S/. 5.13	S/. 8.43	S/. 8.00	S/. 204.12
60	S/. 10,197.49	S/. 29.19	S/. 153.39	S/. 5.11	S/. 8.43	S/. 8.00	S/. 204.12
61	S/. 10,167.85	S/. 29.64	S/. 152.95	S/. 5.10	S/. 8.43	S/. 8.00	S/. 204.12
62	S/. 10,137.75	S/. 30.10	S/. 152.50	S/. 5.08	S/. 8.43	S/. 8.00	S/. 204.12
63	S/. 10,107.18	S/. 30.57	S/. 152.05	S/. 5.07	S/. 8.43	S/. 8.00	S/. 204.12
64	S/. 10,076.13	S/. 31.04	S/. 151.59	S/. 5.05	S/. 8.43	S/. 8.00	S/. 204.12
65	S/. 10,044.61	S/. 31.52	S/. 151.13	S/. 5.04	S/. 8.43	S/. 8.00	S/. 204.12
66	S/. 10,012.60	S/. 32.01	S/. 150.66	S/. 5.02	S/. 8.43	S/. 8.00	S/. 204.12
67	S/. 9,980.09	S/. 32.51	S/. 150.18	S/. 5.01	S/. 8.43	S/. 8.00	S/. 204.12
68	S/. 9,947.08	S/. 33.01	S/. 149.69	S/. 4.99	S/. 8.43	S/. 8.00	S/. 204.12
69	S/. 9,913.55	S/. 33.52	S/. 149.19	S/. 4.97	S/. 8.43	S/. 8.00	S/. 204.12
70	S/. 9,879.51	S/. 34.04	S/. 148.69	S/. 4.96	S/. 8.43	S/. 8.00	S/. 204.12
71	S/. 9,844.94	S/. 34.57	S/. 148.18	S/. 4.94	S/. 8.43	S/. 8.00	S/. 204.12
72	S/. 9,809.83	S/. 35.11	S/. 147.66	S/. 4.92	S/. 8.43	S/. 8.00	S/. 204.12
73	S/. 9,774.18	S/. 35.65	S/. 147.13	S/. 4.90	S/. 8.43	S/. 8.00	S/. 204.12
74	S/. 9,737.98	S/. 36.20	S/. 146.60	S/. 4.89	S/. 8.43	S/. 8.00	S/. 204.12

75	S/. 9,701.22	S/. 36.76	S/. 146.06	S/. 4.87	S/. 8.43	S/. 8.00	S/. 204.12
76	S/. 9,663.88	S/. 37.33	S/. 145.51	S/. 4.85	S/. 8.43	S/. 8.00	S/. 204.12
77	S/. 9,625.97	S/. 37.91	S/. 144.95	S/. 4.83	S/. 8.43	S/. 8.00	S/. 204.12
78	S/. 9,587.47	S/. 38.50	S/. 144.38	S/. 4.81	S/. 8.43	S/. 8.00	S/. 204.12
79	S/. 9,548.37	S/. 39.10	S/. 143.80	S/. 4.79	S/. 8.43	S/. 8.00	S/. 204.12
80	S/. 9,508.67	S/. 39.70	S/. 143.21	S/. 4.77	S/. 8.43	S/. 8.00	S/. 204.12
81	S/. 9,468.35	S/. 40.32	S/. 142.62	S/. 4.75	S/. 8.43	S/. 8.00	S/. 204.12
82	S/. 9,427.41	S/. 40.94	S/. 142.01	S/. 4.73	S/. 8.43	S/. 8.00	S/. 204.12
83	S/. 9,385.83	S/. 41.58	S/. 141.40	S/. 4.71	S/. 8.43	S/. 8.00	S/. 204.12
84	S/. 9,343.60	S/. 42.22	S/. 140.78	S/. 4.69	S/. 8.43	S/. 8.00	S/. 204.12
85	S/. 9,300.73	S/. 42.88	S/. 140.14	S/. 4.67	S/. 8.43	S/. 8.00	S/. 204.12
86	S/. 9,257.19	S/. 43.54	S/. 139.50	S/. 4.65	S/. 8.43	S/. 8.00	S/. 204.12
87	S/. 9,212.97	S/. 44.22	S/. 138.85	S/. 4.63	S/. 8.43	S/. 8.00	S/. 204.12
88	S/. 9,168.07	S/. 44.90	S/. 138.18	S/. 4.61	S/. 8.43	S/. 8.00	S/. 204.12
89	S/. 9,122.47	S/. 45.60	S/. 137.51	S/. 4.58	S/. 8.43	S/. 8.00	S/. 204.12
90	S/. 9,076.17	S/. 46.30	S/. 136.83	S/. 4.56	S/. 8.43	S/. 8.00	S/. 204.12
91	S/. 9,029.15	S/. 47.02	S/. 136.13	S/. 4.54	S/. 8.43	S/. 8.00	S/. 204.12
92	S/. 8,981.40	S/. 47.75	S/. 135.43	S/. 4.51	S/. 8.43	S/. 8.00	S/. 204.12
93	S/. 8,932.90	S/. 48.49	S/. 134.71	S/. 4.49	S/. 8.43	S/. 8.00	S/. 204.12
94	S/. 8,883.66	S/. 49.24	S/. 133.98	S/. 4.47	S/. 8.43	S/. 8.00	S/. 204.12
95	S/. 8,833.66	S/. 50.01	S/. 133.24	S/. 4.44	S/. 8.43	S/. 8.00	S/. 204.12
96	S/. 8,782.88	S/. 50.78	S/. 132.49	S/. 4.42	S/. 8.43	S/. 8.00	S/. 204.12
97	S/. 8,731.31	S/. 51.57	S/. 131.73	S/. 4.39	S/. 8.43	S/. 8.00	S/. 204.12
98	S/. 8,678.94	S/. 52.37	S/. 130.96	S/. 4.37	S/. 8.43	S/. 8.00	S/. 204.12
99	S/. 8,625.76	S/. 53.18	S/. 130.17	S/. 4.34	S/. 8.43	S/. 8.00	S/. 204.12
100	S/. 8,571.76	S/. 54.00	S/. 129.38	S/. 4.31	S/. 8.43	S/. 8.00	S/. 204.12
101	S/. 8,516.92	S/. 54.84	S/. 128.57	S/. 4.29	S/. 8.43	S/. 8.00	S/. 204.12
102	S/. 8,461.23	S/. 55.69	S/. 127.74	S/. 4.26	S/. 8.43	S/. 8.00	S/. 204.12
103	S/. 8,404.68	S/. 56.55	S/. 126.91	S/. 4.23	S/. 8.43	S/. 8.00	S/. 204.12
104	S/. 8,347.25	S/. 57.43	S/. 126.06	S/. 4.20	S/. 8.43	S/. 8.00	S/. 204.12
105	S/. 8,288.93	S/. 58.32	S/. 125.20	S/. 4.17	S/. 8.43	S/. 8.00	S/. 204.12
106	S/. 8,229.71	S/. 59.22	S/. 124.32	S/. 4.14	S/. 8.43	S/. 8.00	S/. 204.12
107	S/. 8,169.57	S/. 60.14	S/. 123.44	S/. 4.11	S/. 8.43	S/. 8.00	S/. 204.12
108	S/. 8,108.50	S/. 61.07	S/. 122.53	S/. 4.08	S/. 8.43	S/. 8.00	S/. 204.12
109	S/. 8,046.48	S/. 62.02	S/. 121.62	S/. 4.05	S/. 8.43	S/. 8.00	S/. 204.12
110	S/. 7,983.50	S/. 62.98	S/. 120.69	S/. 4.02	S/. 8.43	S/. 8.00	S/. 204.12
111	S/. 7,919.54	S/. 63.96	S/. 119.74	S/. 3.99	S/. 8.43	S/. 8.00	S/. 204.12
112	S/. 7,854.59	S/. 64.95	S/. 118.78	S/. 3.96	S/. 8.43	S/. 8.00	S/. 204.12
113	S/. 7,788.64	S/. 65.95	S/. 117.81	S/. 3.93	S/. 8.43	S/. 8.00	S/. 204.12
114	S/. 7,721.66	S/. 66.98	S/. 116.82	S/. 3.89	S/. 8.43	S/. 8.00	S/. 204.12
115	S/. 7,653.65	S/. 68.01	S/. 115.81	S/. 3.86	S/. 8.43	S/. 8.00	S/. 204.12
116	S/. 7,584.58	S/. 69.07	S/. 114.79	S/. 3.83	S/. 8.43	S/. 8.00	S/. 204.12
117	S/. 7,514.44	S/. 70.14	S/. 113.76	S/. 3.79	S/. 8.43	S/. 8.00	S/. 204.12
118	S/. 7,443.21	S/. 71.23	S/. 112.71	S/. 3.76	S/. 8.43	S/. 8.00	S/. 204.12
119	S/. 7,370.88	S/. 72.33	S/. 111.64	S/. 3.72	S/. 8.43	S/. 8.00	S/. 204.12
120	S/. 7,297.43	S/. 73.45	S/. 110.55	S/. 3.69	S/. 8.43	S/. 8.00	S/. 204.12
121	S/. 7,222.84	S/. 74.59	S/. 109.45	S/. 3.65	S/. 8.43	S/. 8.00	S/. 204.12
122	S/. 7,147.09	S/. 75.75	S/. 108.33	S/. 3.61	S/. 8.43	S/. 8.00	S/. 204.12
123	S/. 7,070.17	S/. 76.92	S/. 107.20	S/. 3.57	S/. 8.43	S/. 8.00	S/. 204.12
124	S/. 6,992.06	S/. 78.11	S/. 106.04	S/. 3.54	S/. 8.43	S/. 8.00	S/. 204.12

125	S/. 6,912.74	S/. 79.32	S/. 104.87	S/. 3.50	S/. 8.43	S/. 8.00	S/. 204.12
126	S/. 6,832.19	S/. 80.55	S/. 103.68	S/. 3.46	S/. 8.43	S/. 8.00	S/. 204.12
127	S/. 6,750.39	S/. 81.80	S/. 102.47	S/. 3.42	S/. 8.43	S/. 8.00	S/. 204.12
128	S/. 6,667.32	S/. 83.07	S/. 101.25	S/. 3.38	S/. 8.43	S/. 8.00	S/. 204.12
129	S/. 6,582.96	S/. 84.36	S/. 100.00	S/. 3.33	S/. 8.43	S/. 8.00	S/. 204.12
130	S/. 6,497.30	S/. 85.66	S/. 98.74	S/. 3.29	S/. 8.43	S/. 8.00	S/. 204.12
131	S/. 6,410.31	S/. 86.99	S/. 97.45	S/. 3.25	S/. 8.43	S/. 8.00	S/. 204.12
132	S/. 6,321.97	S/. 88.34	S/. 96.15	S/. 3.21	S/. 8.43	S/. 8.00	S/. 204.12
133	S/. 6,232.26	S/. 89.71	S/. 94.82	S/. 3.16	S/. 8.43	S/. 8.00	S/. 204.12
134	S/. 6,141.16	S/. 91.10	S/. 93.48	S/. 3.12	S/. 8.43	S/. 8.00	S/. 204.12
135	S/. 6,048.65	S/. 92.51	S/. 92.11	S/. 3.07	S/. 8.43	S/. 8.00	S/. 204.12
136	S/. 5,954.71	S/. 93.94	S/. 90.72	S/. 3.02	S/. 8.43	S/. 8.00	S/. 204.12
137	S/. 5,859.31	S/. 95.40	S/. 89.31	S/. 2.98	S/. 8.43	S/. 8.00	S/. 204.12
138	S/. 5,762.43	S/. 96.88	S/. 87.88	S/. 2.93	S/. 8.43	S/. 8.00	S/. 204.12
139	S/. 5,664.05	S/. 98.38	S/. 86.43	S/. 2.88	S/. 8.43	S/. 8.00	S/. 204.12
140	S/. 5,564.14	S/. 99.91	S/. 84.95	S/. 2.83	S/. 8.43	S/. 8.00	S/. 204.12
141	S/. 5,462.69	S/. 101.45	S/. 83.45	S/. 2.78	S/. 8.43	S/. 8.00	S/. 204.12
142	S/. 5,359.66	S/. 103.03	S/. 81.93	S/. 2.73	S/. 8.43	S/. 8.00	S/. 204.12
143	S/. 5,255.04	S/. 104.62	S/. 80.39	S/. 2.68	S/. 8.43	S/. 8.00	S/. 204.12
144	S/. 5,148.79	S/. 106.24	S/. 78.82	S/. 2.63	S/. 8.43	S/. 8.00	S/. 204.12
145	S/. 5,040.90	S/. 107.89	S/. 77.23	S/. 2.57	S/. 8.43	S/. 8.00	S/. 204.12
146	S/. 4,931.34	S/. 109.56	S/. 75.61	S/. 2.52	S/. 8.43	S/. 8.00	S/. 204.12
147	S/. 4,820.08	S/. 111.26	S/. 73.96	S/. 2.47	S/. 8.43	S/. 8.00	S/. 204.12
148	S/. 4,707.09	S/. 112.99	S/. 72.29	S/. 2.41	S/. 8.43	S/. 8.00	S/. 204.12
149	S/. 4,592.36	S/. 114.74	S/. 70.60	S/. 2.35	S/. 8.43	S/. 8.00	S/. 204.12
150	S/. 4,475.84	S/. 116.52	S/. 68.88	S/. 2.30	S/. 8.43	S/. 8.00	S/. 204.12
151	S/. 4,357.52	S/. 118.32	S/. 67.13	S/. 2.24	S/. 8.43	S/. 8.00	S/. 204.12
152	S/. 4,237.37	S/. 120.15	S/. 65.36	S/. 2.18	S/. 8.43	S/. 8.00	S/. 204.12
153	S/. 4,115.35	S/. 122.02	S/. 63.56	S/. 2.12	S/. 8.43	S/. 8.00	S/. 204.12
154	S/. 3,991.44	S/. 123.91	S/. 61.72	S/. 2.06	S/. 8.43	S/. 8.00	S/. 204.12
155	S/. 3,865.61	S/. 125.83	S/. 59.87	S/. 2.00	S/. 8.43	S/. 8.00	S/. 204.12
156	S/. 3,737.83	S/. 127.78	S/. 57.98	S/. 1.93	S/. 8.43	S/. 8.00	S/. 204.12
157	S/. 3,608.08	S/. 129.76	S/. 56.06	S/. 1.87	S/. 8.43	S/. 8.00	S/. 204.12
158	S/. 3,476.31	S/. 131.77	S/. 54.12	S/. 1.80	S/. 8.43	S/. 8.00	S/. 204.12
159	S/. 3,342.49	S/. 133.81	S/. 52.14	S/. 1.74	S/. 8.43	S/. 8.00	S/. 204.12
160	S/. 3,206.61	S/. 135.89	S/. 50.13	S/. 1.67	S/. 8.43	S/. 8.00	S/. 204.12
161	S/. 3,068.61	S/. 137.99	S/. 48.09	S/. 1.60	S/. 8.43	S/. 8.00	S/. 204.12
162	S/. 2,928.48	S/. 140.13	S/. 46.03	S/. 1.53	S/. 8.43	S/. 8.00	S/. 204.12
163	S/. 2,786.18	S/. 142.30	S/. 43.92	S/. 1.46	S/. 8.43	S/. 8.00	S/. 204.12
164	S/. 2,641.67	S/. 144.51	S/. 41.79	S/. 1.39	S/. 8.43	S/. 8.00	S/. 204.12
165	S/. 2,494.92	S/. 146.75	S/. 39.62	S/. 1.32	S/. 8.43	S/. 8.00	S/. 204.12
166	S/. 2,345.90	S/. 149.02	S/. 37.42	S/. 1.25	S/. 8.43	S/. 8.00	S/. 204.12
167	S/. 2,194.57	S/. 151.33	S/. 35.19	S/. 1.17	S/. 8.43	S/. 8.00	S/. 204.12
168	S/. 2,040.89	S/. 153.68	S/. 32.92	S/. 1.10	S/. 8.43	S/. 8.00	S/. 204.12
169	S/. 1,884.83	S/. 156.06	S/. 30.61	S/. 1.02	S/. 8.43	S/. 8.00	S/. 204.12
170	S/. 1,726.35	S/. 158.48	S/. 28.27	S/. 0.94	S/. 8.43	S/. 8.00	S/. 204.12
171	S/. 1,565.42	S/. 160.93	S/. 25.89	S/. 0.86	S/. 8.43	S/. 8.00	S/. 204.12
172	S/. 1,401.99	S/. 163.43	S/. 23.48	S/. 0.78	S/. 8.43	S/. 8.00	S/. 204.12
173	S/. 1,236.03	S/. 165.96	S/. 21.03	S/. 0.70	S/. 8.43	S/. 8.00	S/. 204.12
174	S/. 1,067.50	S/. 168.53	S/. 18.54	S/. 0.62	S/. 8.43	S/. 8.00	S/. 204.12

175	S/. 896.35	S/. 171.15	S/. 16.01	S/. 0.53	S/. 8.43	S/. 8.00	S/. 204.12
176	S/. 722.55	S/. 173.80	S/. 13.44	S/. 0.45	S/. 8.43	S/. 8.00	S/. 204.12
177	S/. 546.06	S/. 176.49	S/. 10.84	S/. 0.36	S/. 8.43	S/. 8.00	S/. 204.12
178	S/. 366.83	S/. 179.23	S/. 8.19	S/. 0.27	S/. 8.43	S/. 8.00	S/. 204.12
179	S/. 184.83	S/. 182.01	S/. 5.50	S/. 0.18	S/. 8.43	S/. 8.00	S/. 204.12
180	(S/. 0.00)	S/. 184.83	S/. 2.77	S/. 0.09	S/. 8.43	S/. 8.00	S/. 204.12
TOTAL		S/. 11,350.00	S/. 21,710.57	S/. 723.75	S/. 1,517.40	S/. 1,440.00	S/. 36,741.72

FORMULA PARA EL CALCULO DE LA TASA DE INTERES COSTO EFECTIVO MENSUAL (TCEM)

Basado en flujos de pagos iguales en el plazo indicado, calculamos la Tasa aplicada que iguale el valor presente de estos pagos con el Monto Solicitado por el cliente menos la Inicial pagada.

Monto Solicitado = Valor de la Vivienda - Inicial pagada

Monto Solicitado = S/. 30,000.00 - S/. 900.00

Cuotas calculada (Pago) = S/. 204.12

nro de cuotas (n) = 1 a 180 meses

$$\text{MONTO SOLICITADO} = \frac{\text{CUOTA 1}}{(1+i)^{(1)}} + \frac{\text{CUOTA 2}}{(1+i)^{(2)}} + \frac{\text{CUOTA 3}}{(1+i)^{(3)}} + \frac{\text{CUOTA 4}}{(1+i)^{(4)}} + \dots + \frac{\text{CUOTA N}}{(1+i)^{(n)}}$$

$$S/. 29,100.00 = \frac{S/. 204.12}{(1+i)^{(1)}} + \frac{S/. 204.12}{(1+i)^{(2)}} + \frac{S/. 204.12}{(1+i)^{(3)}} + \frac{S/. 204.12}{(1+i)^{(4)}} + \dots + \frac{S/. 204.12}{(1+i)^{(180)}}$$

i = (Tasa Costo Efectivo Mensual) = 0.27%

Para obtener la Tasa Costo Efectivo Anual (TCEA) aplicamos la siguiente formula:

$$\text{TCEA} = (1 + \text{TCEM})^{(12)} - 1$$

$$\text{TCEA} = (1 + 0.27\%)^{(12)} - 1$$

$$\text{TCEA} = 3.27\%$$

EJEMPLO : CASO DE INCUMPLIMIENTO DE PAGO

VALOR CUOTA	S/. 204.12	DIAS DE ATRASO	8
INTERES MORATORIO ANUAL (*)	60%	COMISION DE COBRANZA DE 4 A 30 DIAS DE ATRASO	S/. 20.00

FORMULA PARA EL CALCULO DE LA TASA DE INTERES EFECTIVA DIARIA DE LA TASA EFECTIVA ANUAL

(*) IMA = INTERES EFECTIVO MORATORIO ANUAL

(**) IMD = INTERES EFECTIVO MORATORIO DIARIA

$$\text{IMD} = (1 + \text{IMA})^{(1/360)} - 1$$

$$\text{IMD} = (1 + 60.00\%)^{(1/360)} - 1$$

$$\text{IMD} = 0.001306418 = 0.1306\%$$

CALCULO DE LOS INTERESES MORATORIOS POR 8 DIAS DE ATRASO

DONDE: n = N° DE DIAS DE ATRASO

$$\text{IM} = \text{CUOTA} \times [(1 + \text{IMD})^{(n)} - 1]$$

$$\text{IM} = S/. 204.12 \times [(1 + 0.1306\%)^{(8)} - 1]$$

$$\text{IM} = S/. 2.14$$

FORMULA PARA EL CALCULO DEL VALOR DE LA CUOTA CON ATRASO DE 8 DIAS

CUOTA ATRASADA = VALOR CUOTA + INTERES MORATORIO + COMISION DE COBRANZA DE 4 A 30 DIAS DE ATRASO

$$\text{CUOTA ATRASADA} = S/. 204.12 + S/. 2.14 + S/. 20.00$$

$$\text{CUOTA ATRASADA} = S/. 226.26$$

CASO DE CANCELACION ANTICIPADA

MONTO FINANCIADO	S/. 11,350.00	TEA	19.56%
VALOR CUOTA	S/. 204.12	N° DE CUOTAS	180
N° DE CUOTAS PAGADAS	4	COMISION POR CANCELACION ANTICIPADA	0%

EN EL CASO QUE EL CLIENTE SE ENCUENTRE AL DIA EN SU CUARTA CUOTA, Y DESEA REALIZAR UNA CANCELACION ANTICIPADA, EL SALDO TOTAL DE LA DEUDA PACTADA CON LA FINANCIERA. LA ENTIDAD CALCULARA LA REDUCCION TOTAL DE LOS INTERES COMPENSATORIOS, SEGÚN EL CRONOGRAMA DE PAGO SIGUIENTE:

N°	AMORTIZACION	INTERES	SEG. DESGRAV.	SEG. DEL BIEN	PORTES	SALDO CAPITAL	VALOR CUOTA
1	S/. 11.78	S/. 170.24	S/. 5.68	S/. 8.43	S/. 8.00	S/. 11,338.22	S/. 204.12
2	S/. 11.96	S/. 170.06	S/. 5.67	S/. 8.43	S/. 8.00	S/. 11,326.26	S/. 204.12
3	S/. 12.15	S/. 169.88	S/. 5.66	S/. 8.43	S/. 8.00	S/. 11,314.11	S/. 204.12
4	S/. 12.34	S/. 169.70	S/. 5.66	S/. 8.43	S/. 8.00	S/. 11,301.77	S/. 204.12
Total	S/. 48.23	S/. 679.87	S/. 22.66	S/. 33.72	S/. 32.00		S/. 816.48

SALDO DE CAPITAL QUE RESTA POR CANCELAR

CUOTAS CANCELADAS

5	S/. 12.53	S/. 169.51	S/. 5.65	S/. 8.43	S/. 8.00	S/. 11,289.24	S/. 204.12
6	S/. 12.72	S/. 169.32	S/. 5.64	S/. 8.43	S/. 8.00	S/. 11,276.52	S/. 204.12
7	S/. 12.92	S/. 169.13	S/. 5.64	S/. 8.43	S/. 8.00	S/. 11,263.60	S/. 204.12
8	S/. 13.12	S/. 168.94	S/. 5.63	S/. 8.43	S/. 8.00	S/. 11,250.48	S/. 204.12
9	S/. 13.32	S/. 168.74	S/. 5.63	S/. 8.43	S/. 8.00	S/. 11,237.16	S/. 204.12
10	S/. 13.53	S/. 168.54	S/. 5.62	S/. 8.43	S/. 8.00	S/. 11,223.63	S/. 204.12

175	S/. 171.15	S/. 16.01	S/. 0.53	S/. 8.43	S/. 8.00	S/. 896.35	S/. 204.12
176	S/. 173.80	S/. 13.44	S/. 0.45	S/. 8.43	S/. 8.00	S/. 722.55	S/. 204.12
177	S/. 176.49	S/. 10.84	S/. 0.36	S/. 8.43	S/. 8.00	S/. 546.06	S/. 204.12
178	S/. 179.23	S/. 8.19	S/. 0.27	S/. 8.43	S/. 8.00	S/. 366.83	S/. 204.12
179	S/. 182.01	S/. 5.50	S/. 0.18	S/. 8.43	S/. 8.00	S/. 184.83	S/. 204.12
180	S/. 184.83	S/. 2.77	S/. 0.09	S/. 8.43	S/. 8.00	(S/. 0.00)	S/. 204.12
Total	S/. 11,301.77	S/. 21,030.70	S/. 701.08	S/. 1,483.68	S/. 1,408.00		S/. 35,925.24

FORMULA PARA CALCULAR LA CANCELACION ANTICIPADA

(a) CANCELACION ANTICIPADA = SALDO TOTAL DE CUOTAS POR PAGAR - SALDO DE INTERESES - SALDO SEGURO DESG.
- SALDO SEGURO DEL BIEN - SALDO DE PORTES

EL SALDO DE CUOTAS POR PAGAR = SUMA DE CUOTAS PENDIENTES DE PAGO = S/. 35,925.24

EL SALDO DE INTERESES = AL TOTAL DE LOS INTERESES POR COBRAR EN LAS CUOTAS PENDIENTES DE PAGO

EL SALDO DE INTERESES = S/. 21,030.70

EL SALDO DE SEGURO DE DESGRAVAMEN = SUMA DE LOS GASTOS DE SEGURO DE DESGRAVAMEN POR PAGAR PENDIENTES

EL SALDO DE SEGURO DE DESGRAVAMEN = S/. 701.08

EL SALDO DEL SEGURO DEL BIEN = SUMA DE LOS GASTOS DEL SEGURO DEL BIEN POR PAGAR PENDIENTES

EL SALDO DEL SEGURO DEL BIEN = S/. 1,483.68

EL SALDO DE LOS PORTES = SUMA DE LOS GASTOS DE LOS PORTES POR PAGAR PENDIENTES

EL SALDO DE LOS PORTES = S/. 1,408.00

REEMPLAZANDO LOS RESULTADOS OBTENIDOS EN (a), TENEMOS:

CANCELACION ANTICIPADA = S/. 35,925.24 - S/. 21,030.70 - S/. 701.08 - S/. 1,483.68 - S/. 1,408.00

CANCELACION ANTICIPADA = S/. 11,301.77