



Monthly Balance Amortization

Starting Balance \$89,885 | Withdraw \$7,000/month | 20% Annual ROI | Start: October 2026



Goal

Model how long \$89,885 will last with monthly withdrawals of \$7,000 and 20% annual investment return (compounded monthly).



Starting Balance

\$89,885

Initial investment balance



Annual ROI

20%

Monthly return
1.530947%
 $(1 + 0.20)^{(1/12)} - 1$



Monthly Withdrawal

\$7,000

End of each month after ROI is credited



Monthly Calculation

Ending Balance =
Beginning Balance $\times (1 + 1.530947\%)$
– 7,000



Start Date

October 2026

First withdrawal at end of month



Account Depleted

December 2027

15 months
(14 full + 1 partial)



Monthly Amortization Schedule

#	Month	Beginning Balance	ROI @ 1.530947%	Balance Before Withdrawal	Withdrawal	Ending Balance
1	Oct 2026	\$89,885.00	\$1,376.09	\$91,261.09	\$7,000.00	\$84,261.09
2	Nov 2026	\$84,261.09	\$1,289.99	\$85,551.08	\$7,000.00	\$78,551.08
3	Dec 2026	\$78,551.08	\$1,202.58	\$79,753.66	\$7,000.00	\$72,753.66
4	Jan 2027	\$72,753.66	\$1,113.82	\$73,867.48	\$7,000.00	\$66,867.48
5	Feb 2027	\$66,867.48	\$1,023.71	\$67,891.19	\$7,000.00	\$60,891.19
6	Mar 2027	\$60,891.19	\$932.21	\$61,823.40	\$7,000.00	\$54,823.40
7	Apr 2027	\$54,823.40	\$839.31	\$55,662.71	\$7,000.00	\$48,662.71
8	May 2027	\$48,662.71	\$745.00	\$49,407.72	\$7,000.00	\$42,407.72
9	Jun 2027	\$42,407.72	\$649.24	\$43,056.95	\$7,000.00	\$36,056.95
10	Jul 2027	\$36,056.95	\$552.01	\$36,608.97	\$7,000.00	\$29,608.97
11	Aug 2027	\$29,608.97	\$453.30	\$30,062.27	\$7,000.00	\$23,062.27
12	Sep 2027	\$23,062.27	\$353.07	\$23,415.34	\$7,000.00	\$16,415.34
13	Oct 2027	\$16,415.34	\$251.31	\$16,666.65	\$7,000.00	\$9,666.65
14	Nov 2027	\$9,666.65	\$147.99	\$9,814.64	\$7,000.00	\$2,814.64
15	Dec 2027	\$2,814.64	\$43.09	\$2,857.73	\$2,857.73	\$0.00



Account Balance Over Time



Cash Flow Components



Key Results



Starting Capital
\$89,885.00



Total ROI Earned
\$10,972.73



Total Withdrawals
\$100,857.73



Full \$7,000 Withdrawals
14 months



Final Partial Withdrawal
\$2,857.73



Total Withdrawal Period
15 months



Account Depleted
December 2027



Assumptions

	Annual ROI (effective)	20% per year (compounded monthly)
	Monthly ROI rate	1.530947% $((1 + 0.20)^{(1/12)} - 1)$
	Withdrawal amount	\$7,000 per month
	First withdrawal	October 2026 (end of month)
	Withdrawal timing	End of each month, after ROI is credited
	Taxes, fees, inflation	Not included
	Market volatility	Not included (constant 20% return assumed)



Monthly ROI vs. Withdrawal



Important Notes



20% annual return is an aggressive assumption, not a guaranteed yield.



Actual investment returns may be volatile and can be negative in some periods.



Withdrawing a fixed amount during market declines can significantly change the outcome.



This is a mathematical projection, not a prediction of actual portfolio performance.

