

#1

MBN Beef, Inc.
Income Statement
For Year ended Dec. 31, 2009

REVENUES

Calf Sales	300000
Cull Cow Sales	20000
Timber Sales	175000
Gross Profit	<u>495000</u>

OPERATING EXPENSES

Salaries and Benefits	155000
Utility Expense	22000
Gas, Fuel, Oil	19000
Machinery Depreciation	9000
Building Depreciation	22000
Repairs and Maintenance	15000
Property Taxes	39000
Insurance and Licenses	17000
Purchased Feed	21000
Chemicals	1500
Storage	12000
Veterinary Expenses	23500
Total Operating Expenses	<u>356000</u>

NET OPERATING PROFIT

139000

Interest Payment on Machinery Loan	10000
Interest Payment on Real-Estate Loan	33000

NET PROFIT BEFORE TAXES

96000

Corporate Income Taxes	67000
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NET PROFIT AFTER TAXES

29000

#2

$V_n = V_o(1+i)^n$ or $V_n = V_o(1+(i/m))^{n*m}$ $V_o = 110,000$
 $V_n = ?$
 $V_n = 110000 (1 + (.06/12))^{204} = \mathbf{304,277.11}$ $i = .06$
 $n = 17$
 $m = 12$

#3

$$A = Vo / [1-(1+i)^{-n} / i]$$

$$A = 115000 / [1-(1 + (.055/365))^{-730} / (.055/365)] = \$166.37$$

$Vo = 115,000$
 $i = .055$
 $n = 2$
 $m = 365$

Payment	Total Pay.	Interest	Principal Pai	Remaining Principal	0.000151
0				115000.00	
1	166.37	17.33	149.04	114850.96	
2	166.37	17.31	149.06	114701.90	
3	166.37	17.28	149.09	114552.81	
4	166.37	17.26	149.11	114403.70	
5	166.37	17.24	149.13	114254.57	
6	166.37	17.22	149.15	114105.42	
7	166.37	17.19	149.18	113956.24	
8	166.37	17.17	149.20	113807.04	
9	166.37	17.15	149.22	113657.82	
10	166.37	17.13	149.24	113508.58	
720	166.37	0.28	166.09	1661.78	
721	166.37	0.25	166.12	1495.66	
722	166.37	0.23	166.14	1329.52	
723	166.37	0.20	166.17	1163.35	
724	166.37	0.18	166.19	997.16	
725	166.37	0.15	166.22	830.94	
726	166.37	0.13	166.24	664.69	
727	166.37	0.10	166.27	498.42	
728	166.37	0.08	166.29	332.13	
729	166.37	0.05	166.32	165.81	
730	166.37	0.02	166.35	-0.54	

$Vo_{79} = A [1-(1+i)^{-n} / i]$ Payments remaining = 730 - 79 = 651
 $Vo_{79} = 166.37 [1-(1 + (.055/365))^{-651} / (.055/365)] = \mathbf{\$103,156.77}$

#4

Year or #	Payment	Interest	Principal Pai	Additional. P	Remaining Principal	0.06
0					750000	
1	152521.97	45000	107521.97		642478.03	
2	152521.97	38548.68	113973.29		528504.74	
3	152521.97	31710.28	120811.69	152521.97	255171.09	
4	152521.97	15310.27	137211.70		117959.38	
5	125036.94	7077.563	117959.38		0.00	
6						

$Vo = 750,000$ $A = Vo / [1-(1+i)^{-n} / i]$
 $i = .06$ $A = 750000 / [1-(1 + .06)^{-6} / .06] = \mathbf{\$152,521.97}$
 $n = 6$

Extra payment in year 3 means all of the extra payment goes towards principal

#5 100,000 today or 176,000 13 years from now? $V_0 = ?$

a. Find PV of 176,000 $V_n = 176,000$

$V_0 = V_n / (1 + i)^n$ $i = .04$

$V_0 = 176000 / (1 + .04)^{13} = 105,701.04$ $n = 13$

b. Find i $V_0 = 100,000$

$V_0 = V_n / (1 + i)^n$ $V_n = 176,000$

$i = ?$

$n = 13$

Solve equation for i.....

$(1 + i)^n = V_n / V_0$

$[(1 + i)^n]^{1/n} = (V_n / V_0)^{1/n}$

$1 + i = (V_n / V_0)^{1/n}$

$i = (V_n / V_0)^{1/n} - 1$ $i = (176000 / 100000)^{1/13} - 1 = .0444$

You would be indifferent with a rate of 4.44%.

Cash Flow intentionally left blank to give you more practice. Try to refigure the cash flow and then come see me or email me and we can go over the statement.

#6	MBN Beef, Inc.	
	Cash Flow Statement	
	For Year ended Dec. 31, 2009	
	Beginning Cash Jan 1, 2009	547,678
	<u>OPERATING ACTIVITIES</u>	
	<i>Additions to Cash</i>	
	Total Additions to Cash	_____
		=====
	<i>Subtractions to Cash</i>	
	Total Subtractions to Cash	_____
		=====
	Net Cash from Operations	=====
	<u>INVESTING ACTIVITIES</u>	
	Net Cash from Investing	_____
		=====
	<u>FINANCING ACTIVITIES</u>	
	<i>Additions to Cash</i>	
	Total Additions to Cash	_____
		=====
	<i>Subtractions to Cash</i>	
	Total Subtractions to Cash	_____
		=====
	Net Cash from Financing	=====
	Total Cash Flow	=====
	Ending Cash December 31, 2009	=====

Liquidity is an asset's ability to be easily converted through an act of buying or selling without causing a significant movement in the price and with minimum loss of value. Money, or cash on hand, is the most liquid asset.

Assessment of this operation is that they have adequate cash flow and could look to expand their operation or invest in better technology. (you could have other answers as well).