

---

---

INTERNAL RATE OF RETURN CALCULATOR

---

---

CONTENTS

1.1 ASSUMPTIONS >A16  
3.1 INSTRUCTIONS >A58

2.1 SOLUTIONS >A47

---

---

INTERNAL RATE OF RETURN WORKSHEET

---

---

Year	Investment	Annual Cash Inflows
=====	=====	=====
1983	\$41500.00	
1984		\$3194.00
1985		\$4014.00
1986		\$4539.00
1987		\$4890.00
1988		\$5272.00
1989		\$5598.00
1990		\$5926.00
1991		\$6261.00
1992		\$6707.00
1993		\$7086.00
1994		\$7738.00
1995		\$8163.00
1996		\$8614.00
1997		\$9090.00
1998		\$9596.00
1999		\$10132.00
2000		\$10700.00
2001		\$11302.00
2002		\$11941.00
2003		\$96741.00

---

---

FINANCIAL RESULTS:

Input Rate

Internal Rate of Return

Discounted Rate of Return (using Input Rate)  
Rate)

Net Present Value at Input Rate

NPV would = 0 if Input Rate  
were equal to IRR

---

---

INSTRUCTIONS

Enter ASSUMPTIONS >A16

2) Enter guess of IRR at >F47

) Calculate by pressing F9 key

4) PRINT by pressing /PPG

The Discounted Rate of Return (DRR) corrects a theoretical flaw in the IRR calculation. The IRR calculation effectively assumes that the cash inflows over the analysis period are reinvested at the discovered IRR rate. When the IRR rate goes above a realistically achievable rate, say, 15%, it may not be possible to achieve such high percentage earnings by reinvesting the cash inflows in other projects or ventures. The DRR uses the Input Rate as the Reinvestment Rate. The cash flows in column G are reinvested at the Input Rate, with the result printed in column H. The rate which makes the sum of column H equal the investment, is the Discounted Rate of Return.

13 January 23

Net Cash Flows	Present Values	Future Values of Inflows at Input Rate
-\$41500.00	-\$41500.00	
\$3194.00	\$2778.36	\$27509.16
\$4014.00	\$3037.29	\$30867.52
\$4539.00	\$2987.60	\$31164.96
\$4890.00	\$2799.79	\$29977.63
\$5272.00	\$2625.71	\$28856.64
\$5598.00	\$2425.26	\$27358.06
\$5926.00	\$2233.27	\$25858.06
\$6261.00	\$2052.48	\$24392.71
\$6707.00	\$1912.57	\$23330.64
\$7086.00	\$1757.70	\$22008.04
\$7738.00	\$1669.65	\$21458.08
\$8163.00	\$1532.15	\$20211.29
\$8614.00	\$1406.41	\$19042.81
\$9090.00	\$1290.99	\$17942.05
\$9596.00	\$1185.51	\$16911.43
\$10132.00	\$1088.84	\$15942.90
\$10700.00	\$1000.25	\$15032.73
\$11302.00	\$919.04	\$14177.23
\$11941.00	\$844.64	\$13373.92
\$96741.00	\$5952.47	\$96741.00
-----	-----	-----
\$196004.00	\$0.00	\$522156.84

---

12.0000%

14.9597%

13.4979%

\$11277.06

---

Greg D. Rismoen

-41500

522156.84