CS-150L
Computing for Business Students

Instructor:

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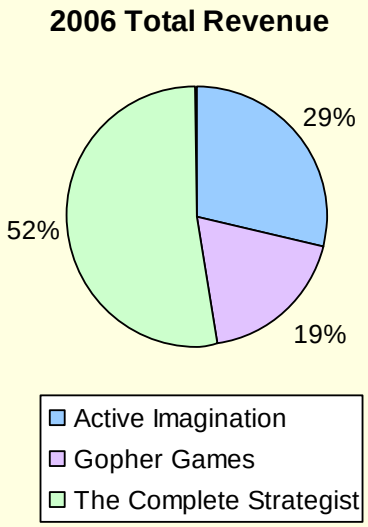


Lab 6: Excel – Sunday March 7th

- Internet research of company income statement. *This is not just busy work but addresses one of the New Mexico Collegiate Business Articulation Consortium required objectives for this course.*
- Chart Wizard
- Bar Charts
- Column Charts
- 3-D Clustered Column Chart
- Pie Charts
- Chart Format Customization
- Chart Data Customization

Excel Error: Value

- Column C shows the equations as text used in B2 and B3.
- Why does B3 show an error?

	A	B	C
1	Date	Thrid Of Month Equation	Equation As Text
2	April 15 2011	May 3, 2011	EOMONTH(A2,0)+3
3	April 15 2011	#VALUE!	EOMONTH(A3,0)+3

The table above is an active worksheet: Click to open.

Quiz: Weighted Average

	A	B	C	D	E
1	**Assignment**	**Points**	**Travis**	**Evan**	**Marie**
2	Homework 1	20	100%	95%	85%
3	Homework 2	25	100%	90%	95%
4	Homework 3	30	100%	92%	75%
5	Final Project	130	85%	91%	98%
6	**Grade**		**90%**	**91%**	**93%**

Which equation can be *filled right* from cell C6, to correctly calculate the weighted average in cells C6:E6?

a) =($C$2*B2+$C$3*B3+$C$4*B4+$C$5*B5)/SUM($B$2:$B$5)

b) =(C2*$B$2+C3*$B$3+C4*$B$4+C5*$B$5)/SUM($B$2:$B$5)

c) =($C$2*B2+$C$3*B3+$C$4*B4+$C$5*B5)/SUM(B2:B5)

d) =AVERAGE(C2:C5)

e) =AVERAGE(C2:C5)/SUM(B2:B5)

Quiz: Interest

	A	B	C	D
1	Daily Periodic Interest Rate:			0.0630%
2				
3	Number of Days	Balance	Interest	
4	41	$1,257.52		

The simple interest on the balance in cell B4 over a period of days given in cell A4 can be calculated by?

a) =$D$1*B4

b) =$D$1 + B4 + A4

c) =$D$1*B4*A4

d) =$D$1 + B4*A4

e) =$D$1*B4 + A4

Income Statement: Exxon Mobil Corp

Revenue	2003 12/31/03	2004 12/31/04	2005 12/31/05	2006 12/31/06	2007 12/31/07
Revenue	237,054	291,252	358,955	365,467	390,328
Other Revenue, Total	9,684	6,783	11,725	12,168	14,224
Total Revenue	246,738	298,035	370,680	377,635	404,552
Excise Taxes Payments	61,500	68,217	72,296	69,584	72,681
Operating Expenses					
Cost of Revenue, Total	190,418	230,666	284,334	281,658	304,064
Sell/Gen/AdminExpenses,Tot	13,396	13,849	14,402	14,273	14,890
Research & Development	1,010	1,098	964	1,181	1,469
Depreciation/Amortization	9,047	9,767	10,253	11,416	12,250
Inter Expense,Net Operatng	207	638	496	654	400
Inter/Invest Inc, Operating	694	776	799	1,051	1,005
Inter/Expnse(In),Net Oper	901	1,414	1,295	1,705	1,405
Unusual Expense (Income)	0	0	--	--	--
Total Operating Expense	214,772	256,794	311,248	310,233	334,078
Operating Income	**31,966**	**41,241**	**59,432**	**67,402**	**70,474**

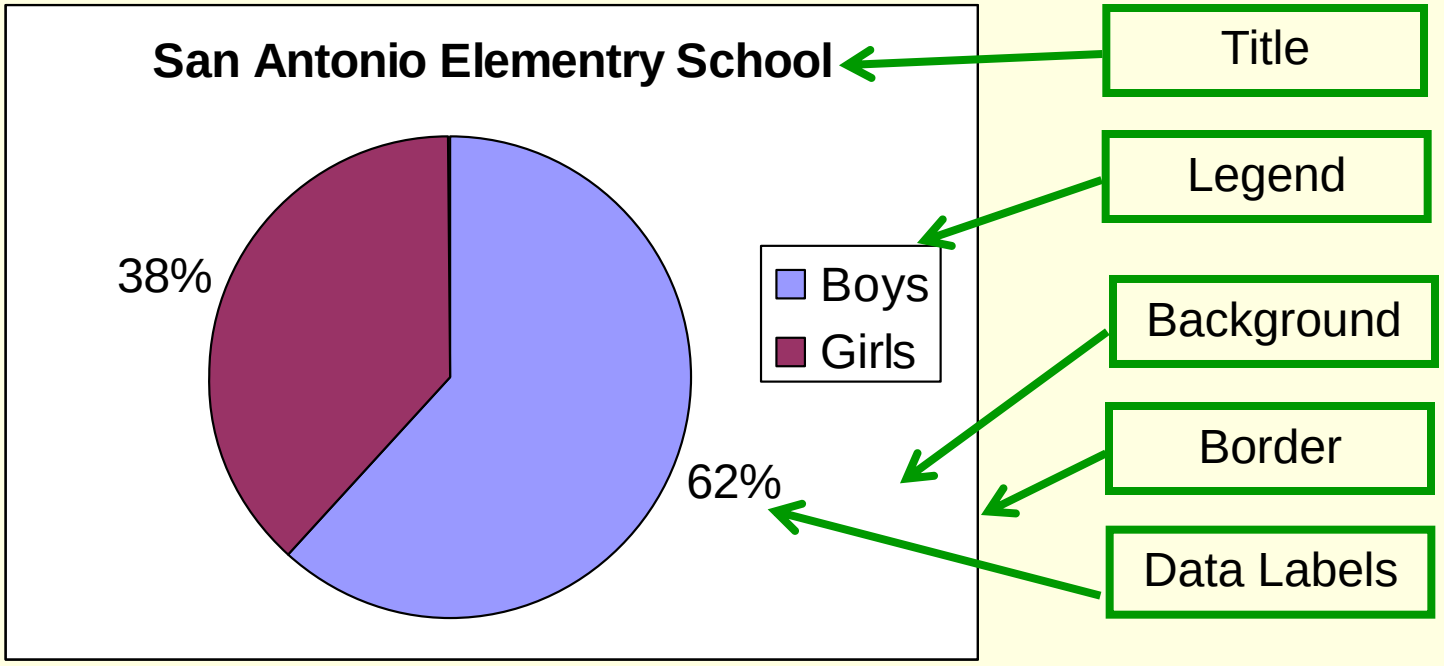
Income Statement

- Total Revenue: Total sales revenue, interest on investments, and other revenue for a particular period.
- Total Expenses: All expenses including meterial costs, salaries, rentals, captial deperciation, research and development. Does not include *taxes*, or *stock dividends*.
- Total Profit: This is also called *Operating Income*

  = (Total Revenue) – (Total Expenses)

Pie Charts

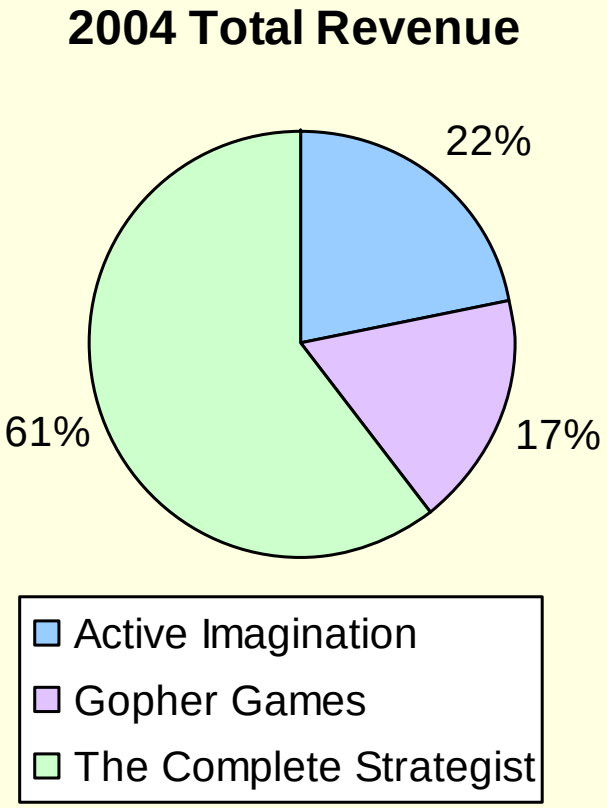
Useful when the data items are disjoint (non-overlapping) and together form a logical whole.



Pie Chart Requirements

Placing this data in a pie chart implies that together they form some meaning full whole. Thus they need to:

- Draw from the ***same*** costumer base.
- Provide ***similar*** products or services.
- Taken together, provide the vast majority of those products or services to all of the given costumer base.



Quiz: Pie Chart

Which of these data sets could be well represented as a pie chart?

a) Total Profit & Total Expenses

b) Total Revenue & Total Expenses

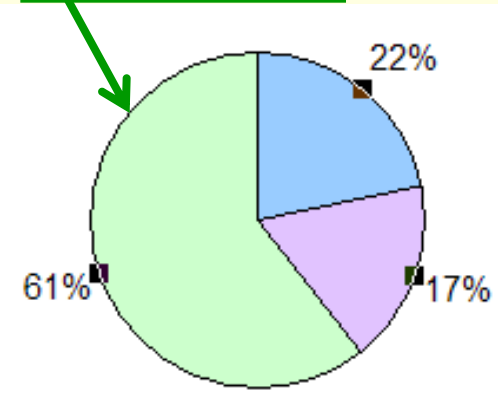
c) Total Revenue in 2006 & Total Revenue in 2007

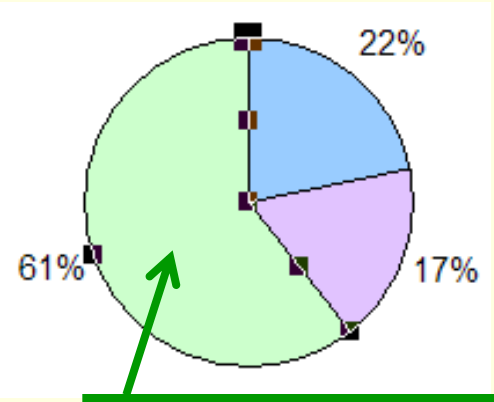
d) Total Expenses in 2006 & Total Expenses in 2007

e) Total Taxes & Total Capital Investments

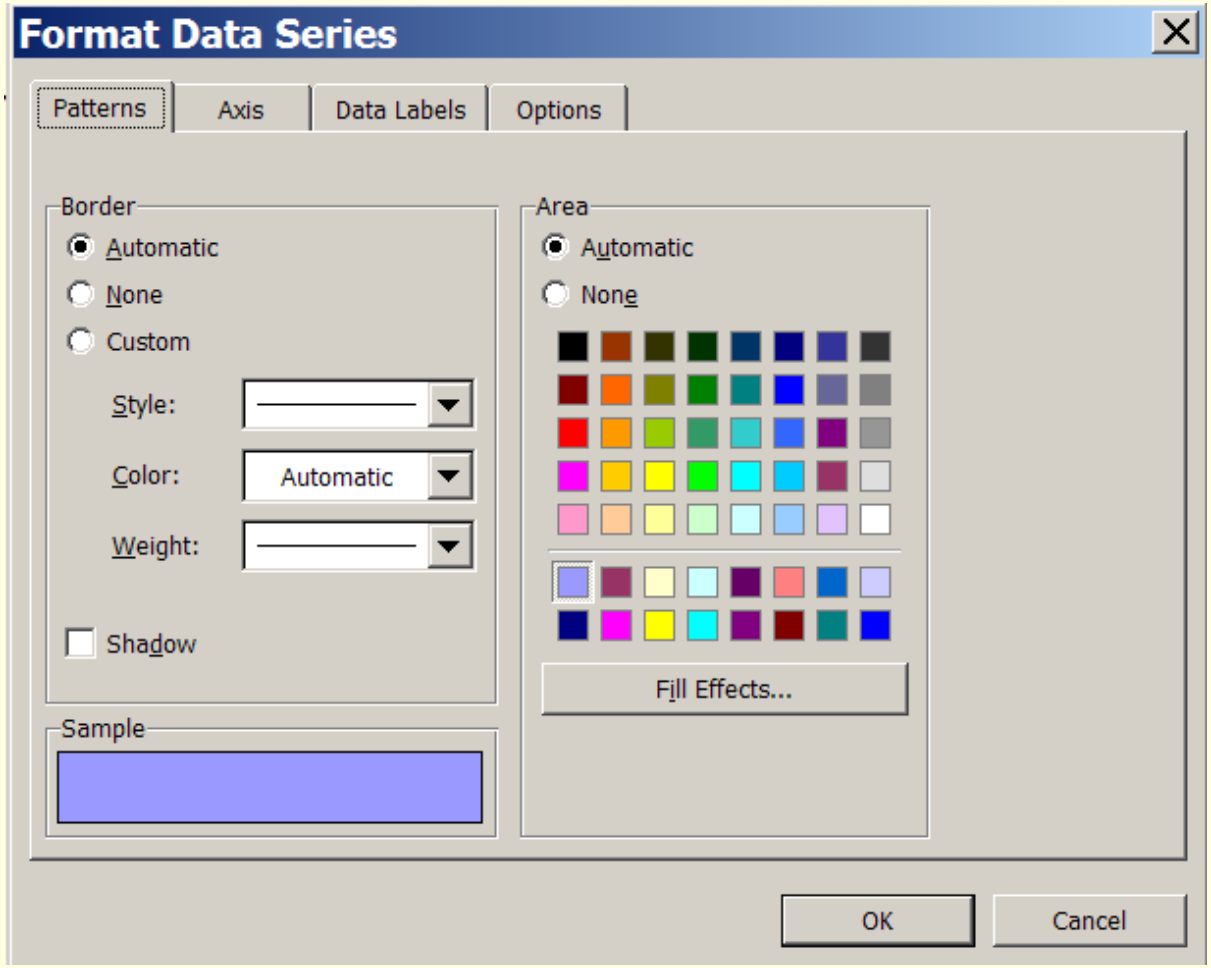
Format Patterns

All sections selected

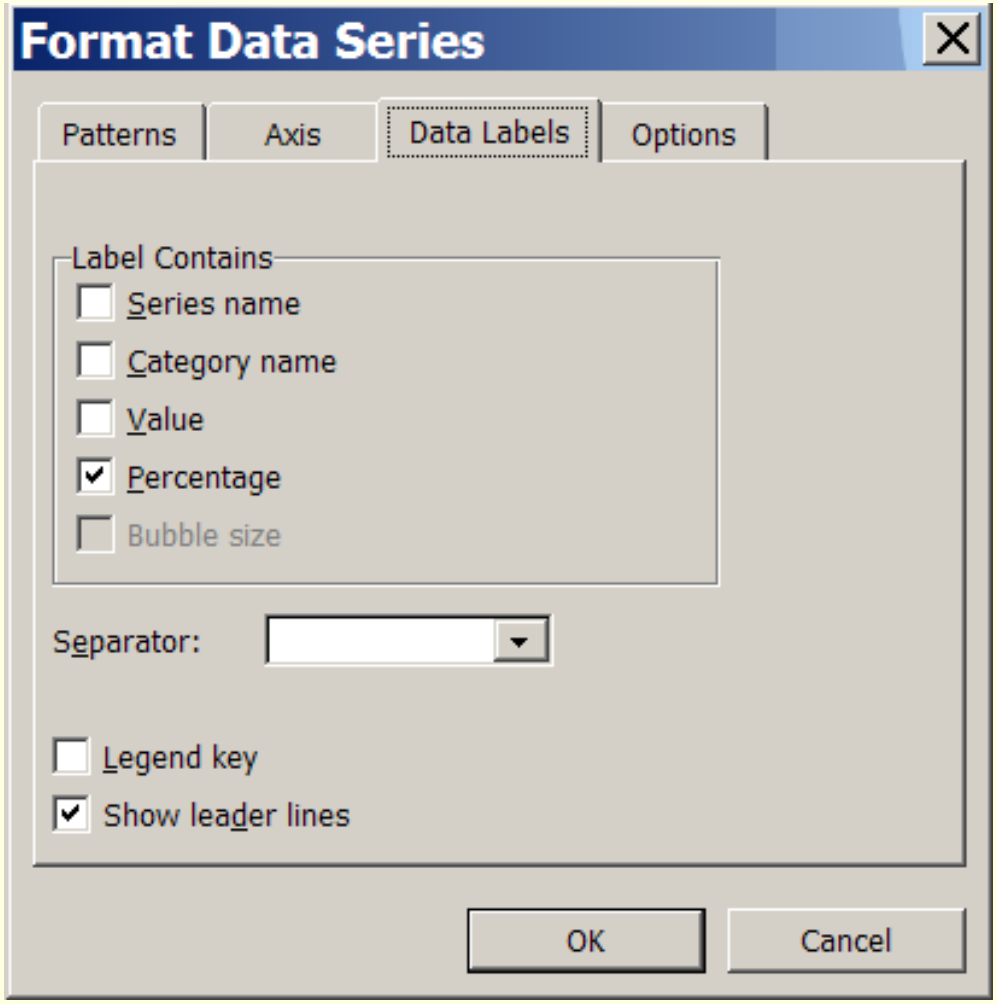




One Section Selected



Format Data Labels



Return on Investment

	A	B	C	D	E
1			ABC	XYZ	PDQ
2	Buy	Date	2-Jan-08	15-Jan-08	22-Jan-09
3		Share Price	$ 105.00	$ 6.63	$ 22.00
4		Investment	$ 1,000.00	$ 1,000.00	$ 1,000.00
5	Sell	Date	12-Mar-09	12-Mar-09	12-Mar-09
6		Share Price	$ 110.22	$ 7.56	$ 24.00
7	Gain (dollars)				
8	Time Held (days)				
9	Gain (% Annual)				

- Which investment was the best?
- What equation should be entered in cell C7 and filled across through E7?

Stock Investment Gain (dollars)

	A	B	C	D	E
1			ABC	XYZ	PDQ
2	Buy	Date	2-Jan-08	15-Jan-08	22-Jan-09
3		Share Price	$ 105.00	$ 6.63	$ 22.00
4		Investment	$ 1,000.00	$1,000.00	$ 1,000.00
5	Sell	Date	12-Mar-09	12-Mar-09	12-Mar-09
6		Share Price	$ 110.22	$ 7.56	$ 24.00
7	Gain (dollars)		=(C4/C3) * C6 - C4		

Number of Shares Purchased

Sale Value

7	Gain (dollars)	$ 49.71	$ 140.27	$ 90.91

Time Held (days)

	A	B	C	D	E
1			ABC	XYZ	PDQ
2	Buy	Date	2-Jan-08	15-Jan-08	22-Jan-09
3		Share Price	$ 105.00	$ 6.63	$ 22.00
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5	Sell	Date	12-Mar-09	12-Mar-09	12-Mar-09
6		Share Price	$ 110.22	$ 7.56	$ 24.00
7	Gain (dollars)		$ 49.71	$ 140.27	$ 90.91
8	Time Held (days)		=C5 - C2	422	49
9	Gain (% annual)				

Annual Percentage Gain

	A	B	C	D	E
1			ABC	XYZ	PDQ
2	Buy	Date	2-Jan-08	15-Jan-08	22-Jan-09
3		Share Price	$ 105.00	$ 6.63	$ 22.00
4		Investment	$ 1,000.00	$ 1,000.00	$ 1,000.00
5	Sell	Date	12-Mar-09	12-Mar-09	12-Mar-09
6		Share Price	$ 110.22	$ 7.56	$ 24.00
7	Gain (dollars)		$ 49.71	$ 140.27	$ 90.91
8	Time Held (days)		435	422	49
9	Gain (% annual)		=(C7/C4) / (C8/365)		

Percent Gain

Number of years

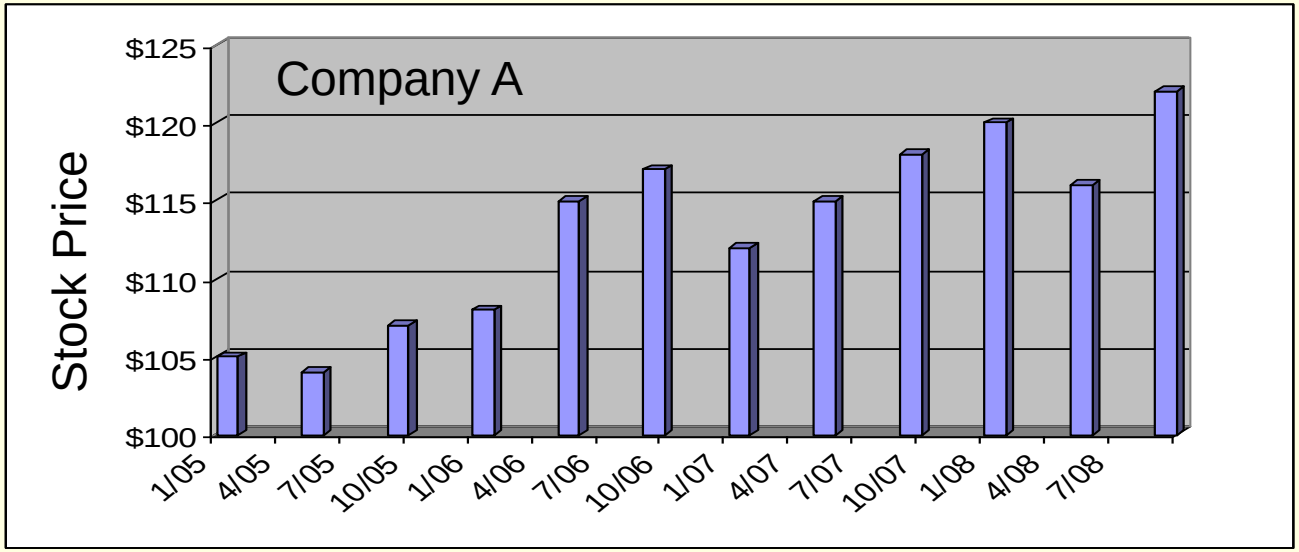
9	Gain (% annual)	4.2%	12.1%	67.7%

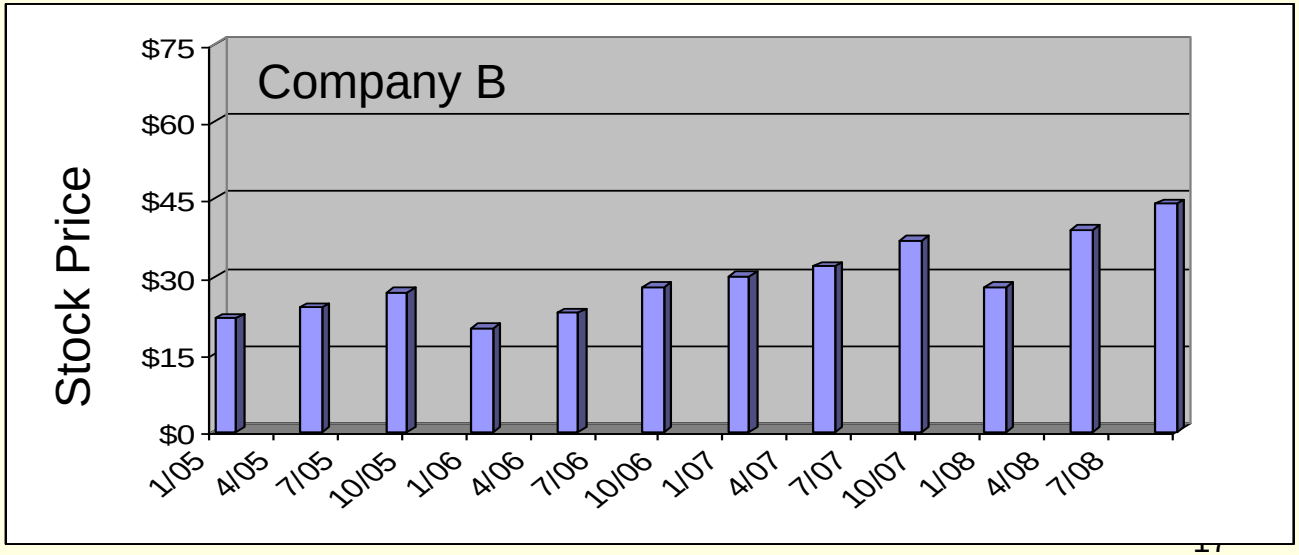
Chart Comparison

Both charts show ***stock price*** at market close once per quarter from **1/1/2005** through **10/1/2007**.

Which company was the better investment?

Which was more volatile?





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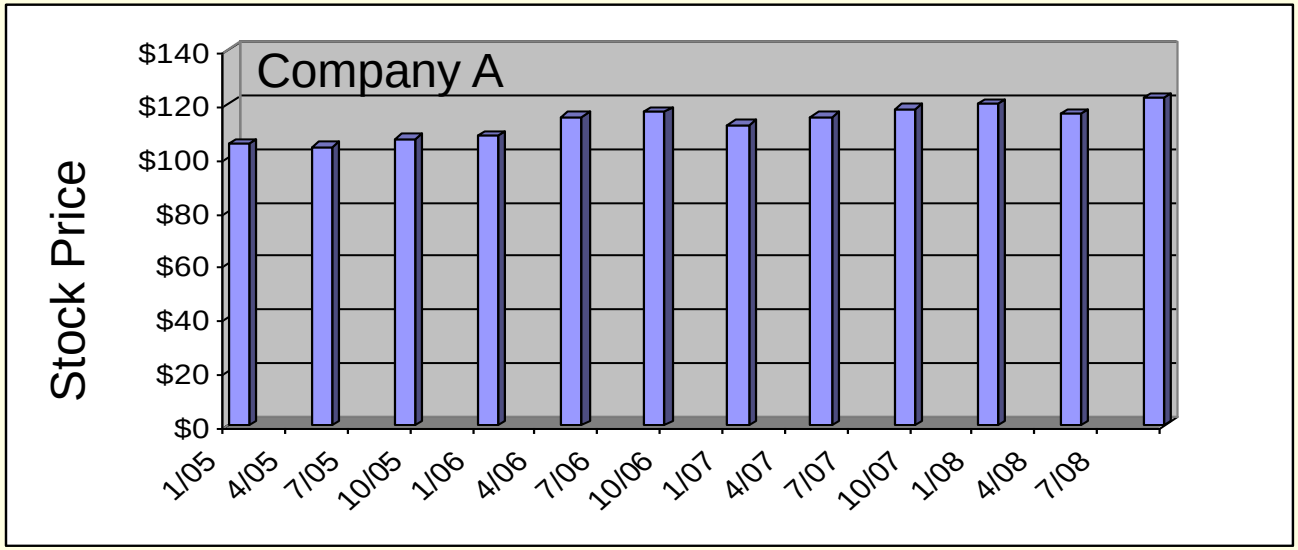
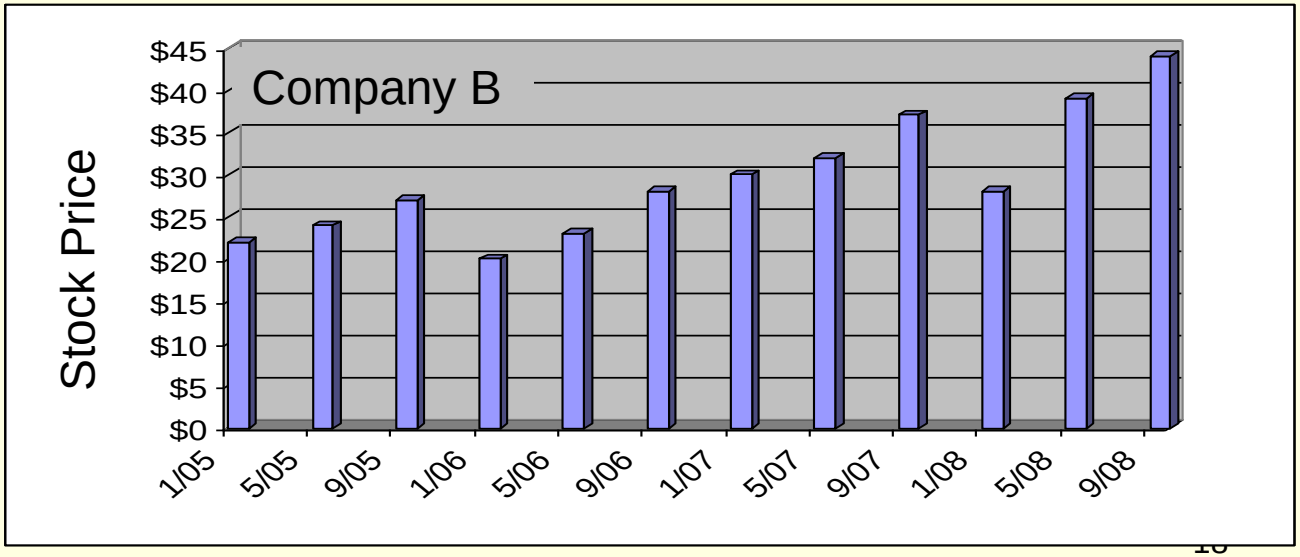
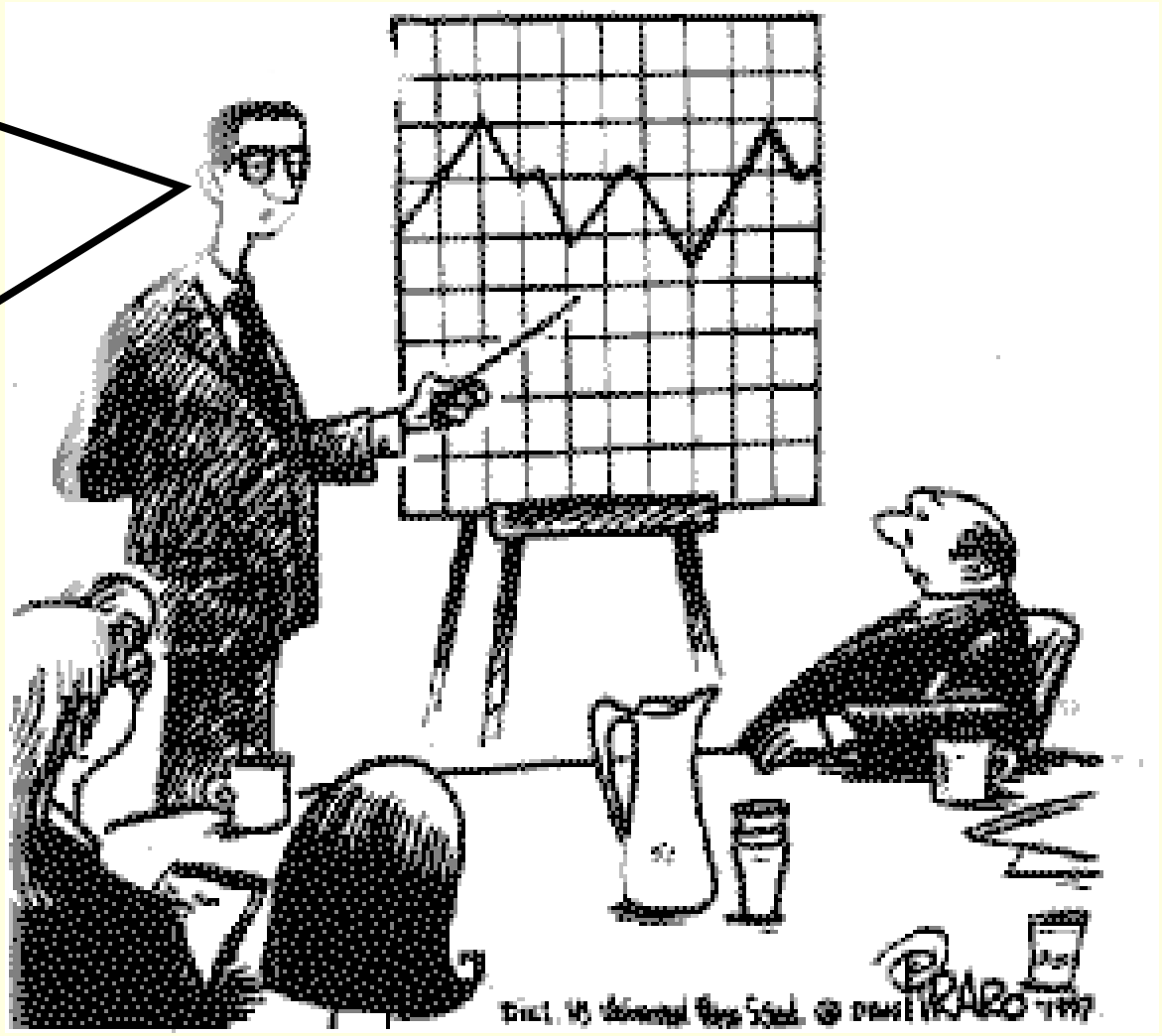


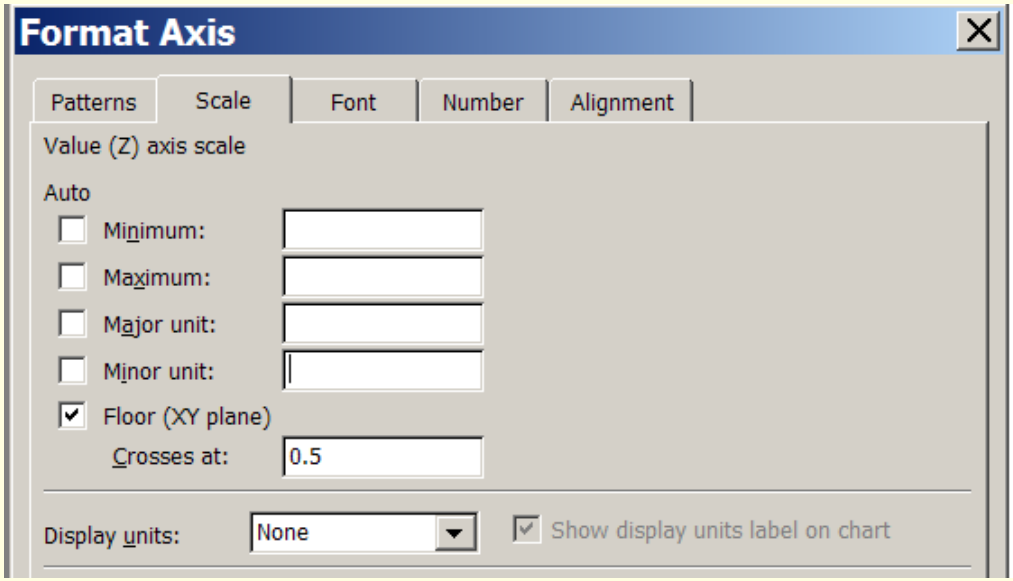


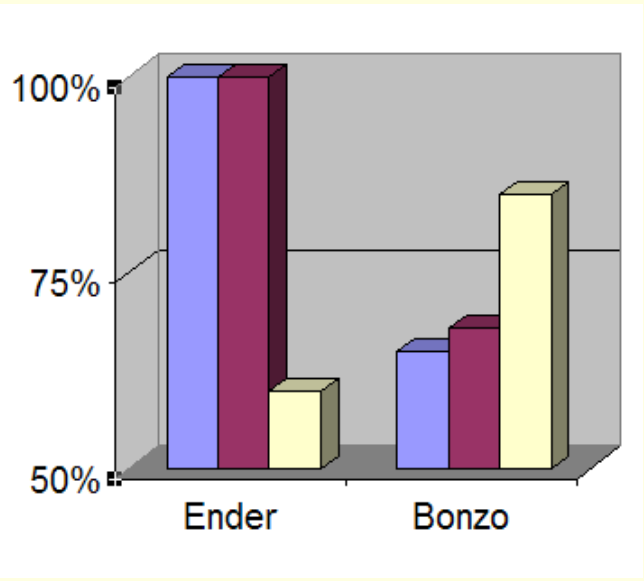
BIZARRO – by Dan Piraro

... and here's a chart that shows what you might see if you looked at a mountain range through a tennis racket.



Quiz: Chart Axis Format





What settings were used in the chart:

a) Minimum=0.0, Maximum=1.0, Major Unit=0.1

b) Minimum=0.1, Maximum=0.25, Major Unit=0.25

c) Minimum=0.5, Maximum=1.0, Major Unit=0.5

d) Minimum=0.5, Maximum=1.0, Major Unit=0.25

e) Minimum=0.1, Maximum=1.0, Major Unit=0.5

Quiz: Chart Comparison

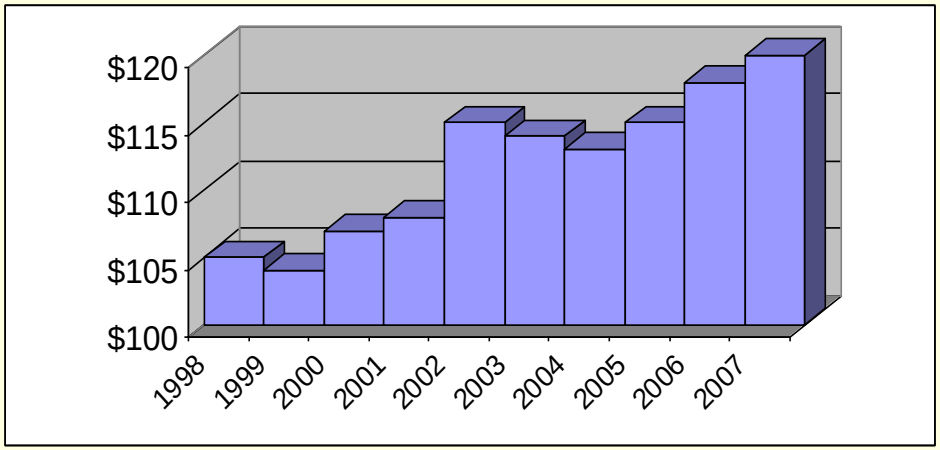
Which of these two stocks received the higher rate of return during the ten year period from 1998 through 2008?

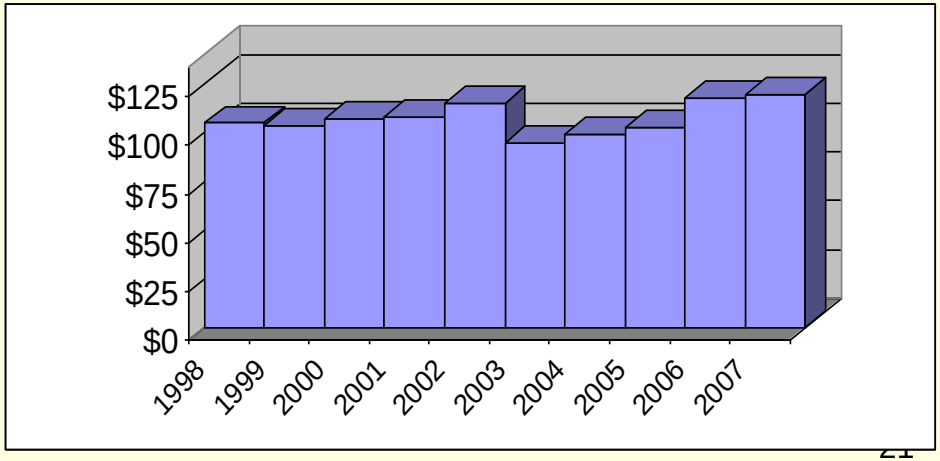
a) The one on the top.

b) The one on the bottom.

c) They are both about the same.

Stock Share Price at close of first Market day of year.





Quiz: Interest

- Cell A1 contains the APR of an account that pays simple interest.
- Cell A2 contains the original balance on the account.
- Cell A3 contains the number of months the account has been accruing interest.
- What is the current balance of the account?

a) A2+A1*A2*A3

b) A2+A1+A3

c) A2+(A1/12)+A3

d) A2+(A1/12)+A2*A3

e) A2+(A1/12)*A2*A3