

# Investigation 4. Finance. Investment Comparison.

(In Class Part.) Calculators Allowed.

50 minutes.

Name \_\_\_\_\_

Caitlyn has \$2000 to invest for two years.

She has visited several banks and found four different options.

A simple interest account at 5%,

A compound interest account at 4%, compounding yearly

A compounding interest account of 3.5% compounding quarterly,

And a compounding interest account of 3.45% compounding monthly.

Draw a table and show the calculations to show her how much money she could earn from each option.

Draw a graph to indicate the shape of the interest growth patterns.

with a legend (4 colour?)

Which is the better option?

PxRxTxT Marks /20

shows the same

ST	P	Int	N.P.
Term			
Y1	2000	100	2100
Y2	2000	100	2200

2 C.I.

2000	480	2080
2080	83.2	2163.20

even better  
 $2000(1 + \frac{0.04}{1})^1$

$2000(1 + \frac{0.035}{4})^{4 \times 1}$

3

2000	0.035	2070.92
	$2000.92(1 + \frac{0.035}{4})^4$	

better

2070.92	0.035	2144.36
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4

2000	$(1 + \frac{0.0345}{12})^{12}$	2070.10
2070.10	$(1 + \frac{0.0345}{12})^{12}$	2142.66

worst