

Investment Pros & Cons



Goals

- ◉ Examine ways to avoid risky investment choices
- ◉ Graph the change in the market value of an investment over a long period of time
- ◉ Use a line of best fit to predict the approximate future of an investment

SEC

- “Securities and Exchange Commission”
- An independent federal agency whose purpose is to prevent the return of the unsound stock selling practices and schemes that were common prior to October 29, 1929 (Black Tuesday)



Crowd
gathering on
Wall Street
after the 1929
crash.

SEC

- 1. Require companies that sell stock in more than one state must register with the SEC
- 2. To protect investors against misrepresentation and fraud in the issuance and sale of securities
- The SEC is there to protect you, but can't keep you from making stupid decisions

Investment Booby Traps

- ◉ Investment come-ons operate on the principle that greed will overcome common sense
- ◉ Examples
 - > Worried about inflation, diamonds are an investor's best friend
 - > Learn how to make quick money...for only \$1000, you can make 10's of thousands

Tips from the SEC

- ◉ Do not deal with security firms or salespeople with whom you are not personally familiar with.
- ◉ Consult people you trust and are knowledgeable
- ◉ Be sure you understand the risk ...risk cannot be eliminated, but can be managed

Tips from the SEC

- Be sure the level of risk is not too great for the for the gain you expect to receive
- Get it in writing...tell salespeople who are promising a specific investment result to put it in writing
- Give at least as much consideration to your investments as you would to any other valuable asset or property

Tips from the SEC

- ◉ Do not “play the market”—buy stocks with the intention of selling with a profit in only a few weeks
- ◉ Do not listen to high pressure sales talks
- ◉ Beware of tips, rumors and promises of spectacular profits
- ◉ A deal that sounds too good to be true probably is *too good to be true*

More tips

- ◉ Be diligent and do your homework about investments
- ◉ Contact companies or brokerage firms
- ◉ Look at the internet for trends
- ◉ Use Google Finance or other websites
- ◉ Never risk more than you're willing to lose

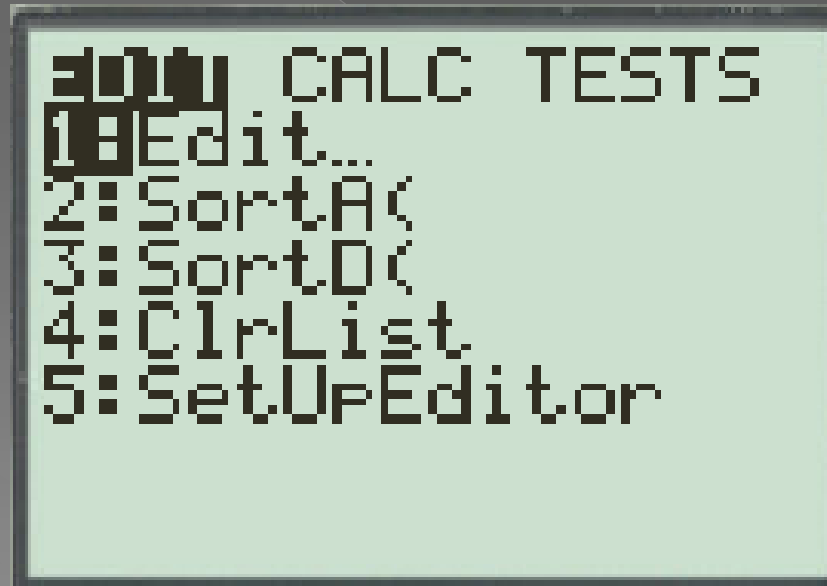
Beware of Broker



- ◉ Most brokers are honest
- ◉ Beware of a salesperson who
 - > does not have a reputation that you can check on
 - > Plugs one certain stock or mutual fund & refuses to sell anything else
 - > Promises a quick, sure profit
 - > Claims to have inside info
 - > Urges you to hurry before prices go up

Scatter Plots

- Plot the date on the x-axis and price on the y-axis
- Each pair is plotted as a point
- STAT, 1:Edit



```
STAT TESTS
1:Edit...
2:SortA(
3:SortD(
4:ClrList
5:SetUpEditor
```


- Change window

```
WINDOW
Xmin=-.5
Xmax=6
Xscl=.5
Ymin=0
Ymax=20
Yscl=2
Xres=1
```

- 2nd , Y=

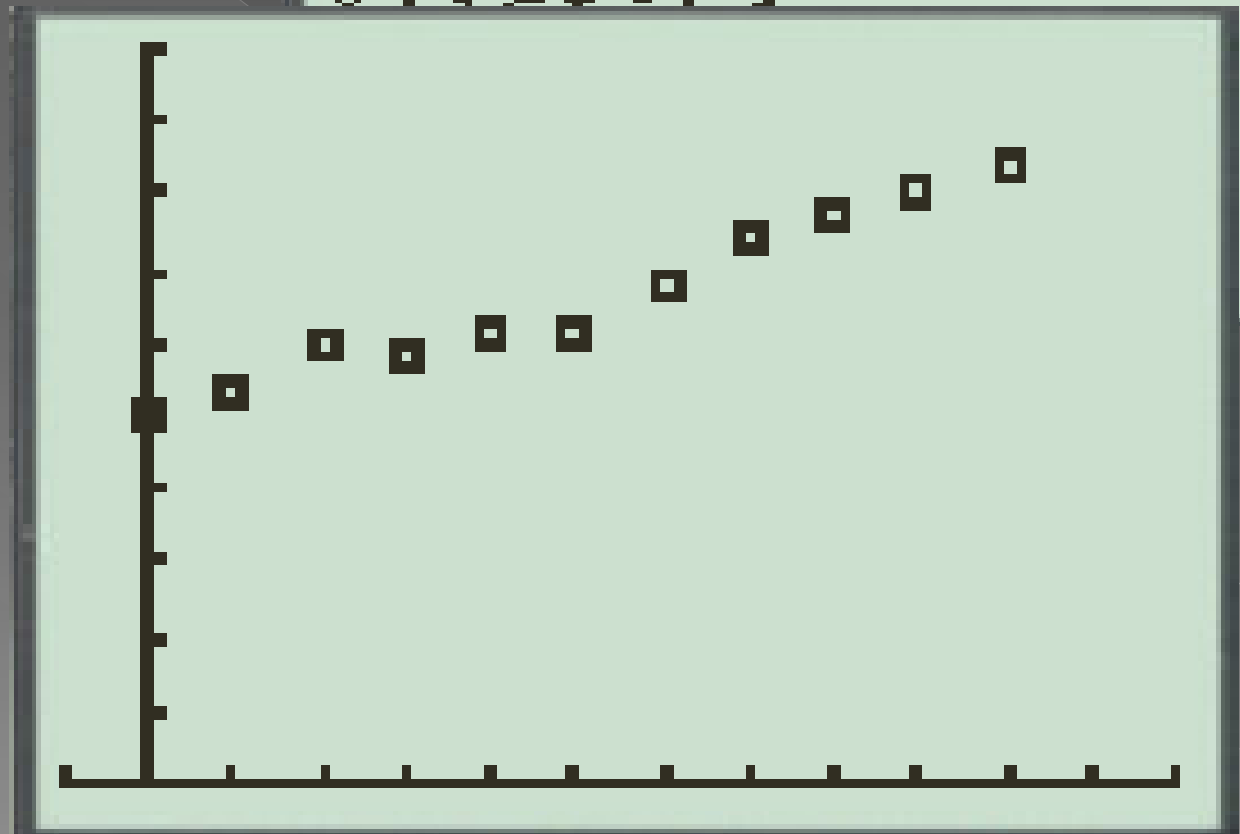
- Enter

```
5: PlotsOn
1: Plot1...Off
  [ ] L1 L2 [ ]
2: Plot2...Off
  [ ] L1 L2 [ ]
3: Plot3...Off
  [ ] L1 L2 [ ]
4: PlotsOff
```

○ Highlight following



○ Graph



Broken Line Graph

- Select the 2nd graph in the type category



Plot2

On Off

Type: L1

Xlist: L1

Ylist: L2

Mark: □ + .



Line of best fit (best fit line)

- To do this we can use linear regression
- 2nd 0, Diagnostic on, Enter, Enter

DiagnosticOn

Done

+b)

TESTS
Stats
Stats
led
g(ax+b)
Reg
Reg
Reg

LinReg

$$y = ax + b$$

$$a = 1.369090909$$

$$b = 9.8045455$$

$$r^2 = .9703408974$$

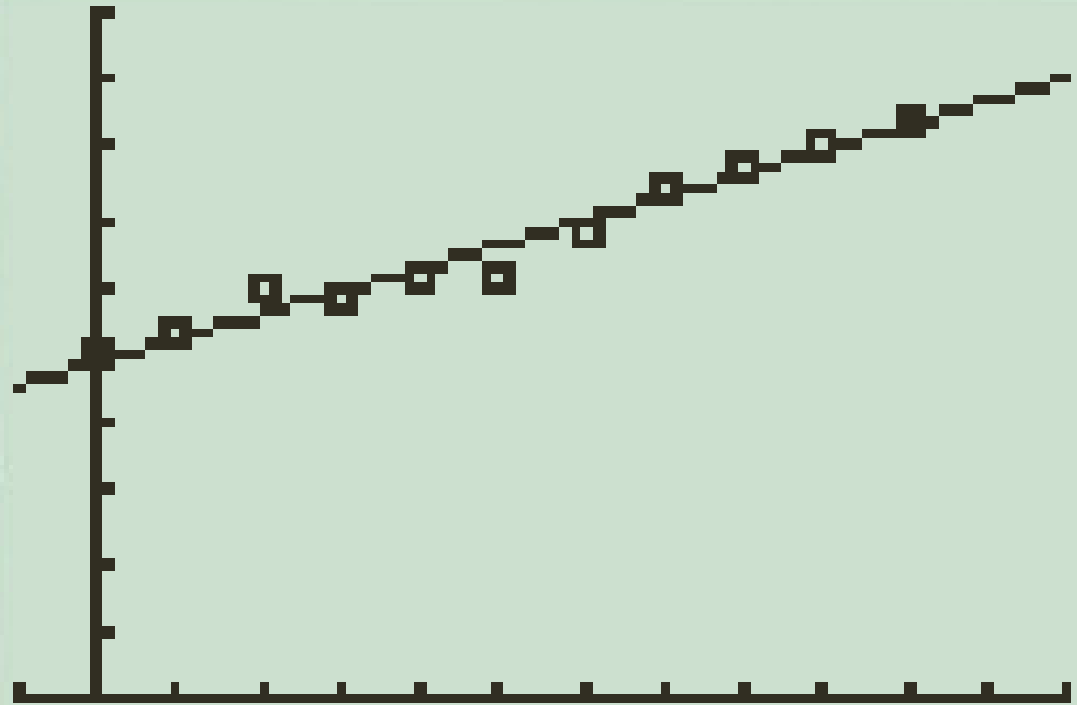
$$r = .9850588294$$



Graphing the LOBF

- Y= , then type in the value for a and b into $y = ax + b$, press Graph

```
Plot1 Plot2 Plot3
Y1=1.369X+
Y2=
Y3=
Y4=
Y5=
Y6=
```



Using the LOBF to make Predictions

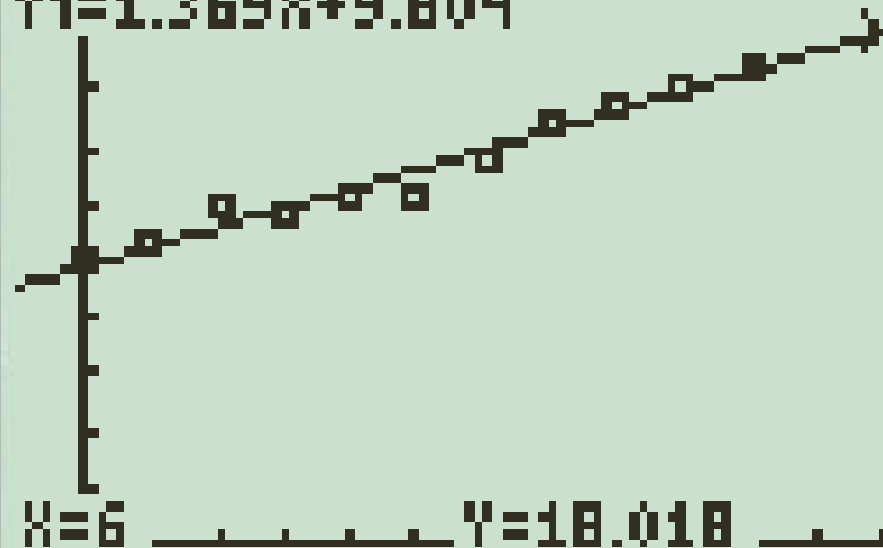
- Use TRACE or 2nd Trace → 1:Value to select a x value and make predictions about future values
- What will this value be in 6 years?

```

CALCULATE
1: value
2: zero
3: minimum
4: maximum
5: intersect
6: dy/dx
7: ∫ f(x) dx

```

$$Y1=1.369X+9.804$$



Want to make it easier??

NO

YES

Put the equation into y= directly

- STAT, → CALC, 4: LinReg (ax+b)
- ENTER, VARS, → 1:Function, 1: Y₁
- Enter
- Looks

```
Li LinReg  
y=mx+b
```

```
Plot1 Plot2 Plot3  
Y1=1.3690909090  
91X+9.8045454545  
455  
Y2=  
Y3=  
Y4=  
Y5=
```

```
369090909  
804545455  
9703408974  
850588294
```


Homework

- ◉ Page 385 TYS 1-7

Day 2

- ◉ Assignment
- ◉ EYS P.386 #4-15
- ◉ MR p.387 #1,5