Welcome Back

Exam- Will be in class next week (Thursday and Friday)

Covers...

What we were reviewing before the break

Simple Interest I=Prt

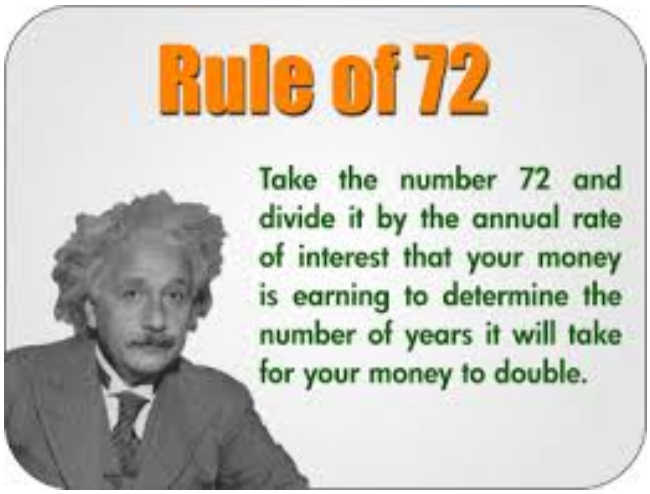
Compound Interest

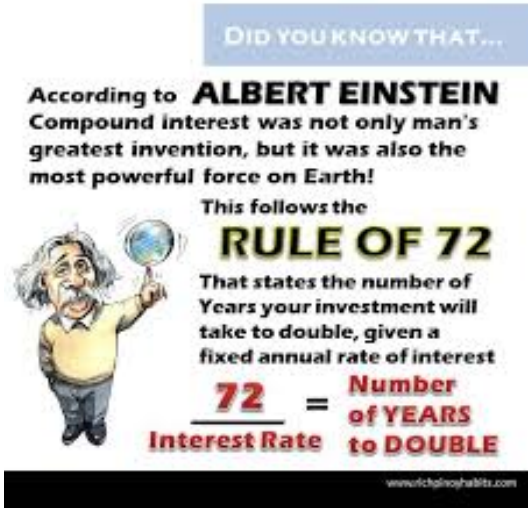
Finishing up the Money unit with...

1) The Rule of 72

2) Rate of Return

# the RULE of 72




Interest rate


Just to clarify...

The rule of 72 states that if you divide 72 by the interest rate you can tell APPROXIMATELY how long it will take for an investment to double

# the RULE of 72


Example: How long would an investment take to double if it was 10%

1) We know that $\frac{72}{r}$ = the time needed for an investment to double

2) r=interest rate so in this example r=10%

3) So 72/10= 7.2 years for your investment to double at an interest rate of 10%.

Using the rule of 72 calculate how long it would take an investment to double according to the interest rates given below;

a) 2% $\frac{72}{2}$ = 36 years for an investment to double

b) 5% → $\frac{72}{5}$ = 14.4 years.

c) 9% → 72/9 = 8 years.

d) 12%= $\frac{72}{12}$ = 6 years

e) 25% $\frac{72}{25}$ = 2.88 years.

http://vimeo.com/102765388

# Rate of Return

Rate of return is the ratio of money gained (or lost) on an investment relative to the amount of money invested.

Rate of return= [(Return- Principle)/ Principle] x 100%

Return is the amount you earn or lose

Principle is the amount you invest

# Rate of Return

Example: You invested $100 in stocks after 1 year, it is worth 110$. What is the rate of return.

Rate of return= [(Return- Principle)/ Principle] x 100%

Return = 110

Principle = invested/borrowed. 100

[(110-100)/100]x100

[10/100] x100

[10%] x100

= 10%

# Examples

1) What is the rate of return if a $2,000 investment was worth $2,250 after 1 year?

Rate of Return = ((2250 - 2000)/2250) x 100

(250/2250) x 100%

0.11 x 100%

11%

2) What is the rate of return if a $5,000 investment was worth $6,500 after 1 year?

Rate of Return: ((6500 - 5000)/6500) x 100

3) What is the rate of return if a $3,500 investment was worth $3,100 after 1 year?

((3100 - 3500)/3100) x 100

Rule of 72 sheet.

$$\frac{72}{r}$$