Today is 9/25/17
You will need a graphing calculator and your checking and saving note packet today

Agenda:

Brain teaser

Interest Practice

Test Wednesday!

2. How much money will you have to invest today in order to have $1,000,000 in 30 years, compounded monthly at a 4% interest?

x12

N = 360
I% = 4
PV = ? 301,795.87
PMT = 0
FV = 1,000,000
P/Y = 12
C/Y = 12 (automatically fills in same as P/Y)

3. If you start with $100,000 today, how long until you have $1,000,000 if invested at 5% compounded quarterly? x4

N = ? → 185
I% = 5
PV = 100,000
PMT = 0
FV = -1,000,000
P/Y = 4
C/Y = 4

4. If you start with $50,000 and have $75,000 in 20 years, what was your interest rate if your investment was compounded monthly? x12

N = 12x20 = 240
I% = ? → 2.03
PV = -50,000
PMT = 0
FV = 75,000
P/Y = 12
C/Y = 12

Use the Finance App to Calculate Monthly Payments page 25

You found a nice car at a dealership for $15,000 plus tax and $100 DMV fees. You intend to make a $1,000 down payment. How much will you need a loan for?

tax (15,000)(.085) = 1275

15000
1275
100
16375 - 1000 = $15,375

What will be your monthly payments if you finance at 7.8% for 5 years?

N = 5×12 = 60
I% = 7.8
PV = 15,375
? → PMT = $310.28
FV = 0
P/Y = 12
C/Y = 12

The dealership is running a 0% interest deal. Recalculate your monthly payments.

The only thing you need to change in the Finance App is I% = 0

$256.25

You can only afford $300/month. What is the maximum interest rate you can afford?

N = 60
I% = 7.9
PV = -15,375
PMT = 300
FV = 0
P/Y = 12
C/Y = 12

6.4%