

HOMEWORK Questions

p. 493: #3, 5, 6, & 9

NOTE: When using the TI-84...

Each question must have the following completed for homework
AND beginning of class tomorrow you will be given time to solve.

```
N=  
I%=  
PV=  
PMT=  
FV=  
P/Y=  
C/Y=  
PMT:  END  BEGIN
```

3. Darlene has invested \$350 at the end of each month, at 7.2% compounded monthly, for 18 years. What is the investment's future value? How much interest has she earned?

← APP Regular Payments

$N \Rightarrow 12 \times 18 = 216$

$I\% \Rightarrow 7.2$

$PV = 0$ ← Investing

$PMT \Rightarrow -350$

a) $FV \Rightarrow 154\,030.54$

$P/Y \Rightarrow 12$

$C/Y \Rightarrow 12$

END

b) Pay Out
 $= N \times PMT$
 $= 216 \times 350$
 $= 75\,600$

$I = 154\,030.54$
 $- 75\,600$
 $\underline{\underline{\$78\,430.54}}$

9. What interest rate, compounded monthly, is required to make monthly payments of \$500 grow to \$35 000 in 5 years?

$$N = 5 \times 12 \Rightarrow 60$$

$$* \frac{I}{Y}$$

$$PV = 0$$

$$PMT = -500$$

$$FV = 35000$$

$$P/Y = 12$$

$$C/Y = 12$$

6.1%

```

N=60
I%=6.127986069
PV=0
PMT=-500
FV=35000
P/Y=12
C/Y=12
PMT: END  BEGIN
    
```

5. Fraser, who is 16 years old, wants to buy a car when he is 21. He deposits \$600 every 3 months, from his part-time job, in a savings account that earns 6.8%, compounded quarterly. How much money will he have to buy his car when he is 21? How much interest will he have earned?

$N = 4 \times 5 \Rightarrow 20$
 $I = 6.8$
 $PV = 0$
 $PMT = -600$
 $*FV =$
 $P/Y = 4$
 $C/Y = 4$
 END

N=20
I%=6.8
PV=0
PMT=-600
FV=14150.76921
P/Y=4
C/Y=4
PMT: <input type="checkbox"/> END <input checked="" type="checkbox"/> BEGIN

a) \$14150.77

b) Pay
 $= 20 \times 600$
 $= 12000$

 $I = 14150.77$
 $- 12000$
\$2150.77

IN CLASS PRACTICE WITH THE TI-84...



p. 493: #1, 2, 4, 7, 8, 10, 11, 12, 13, 15

Finish for homework...each question must have the following AND beginning of class tomorrow you will be given time to solve (while I check :-)

```
N=  
I%=  
PV=  
PMT=  
FV=  
P/Y=  
C/Y=  
PMT:BEGIN BEGIN
```