

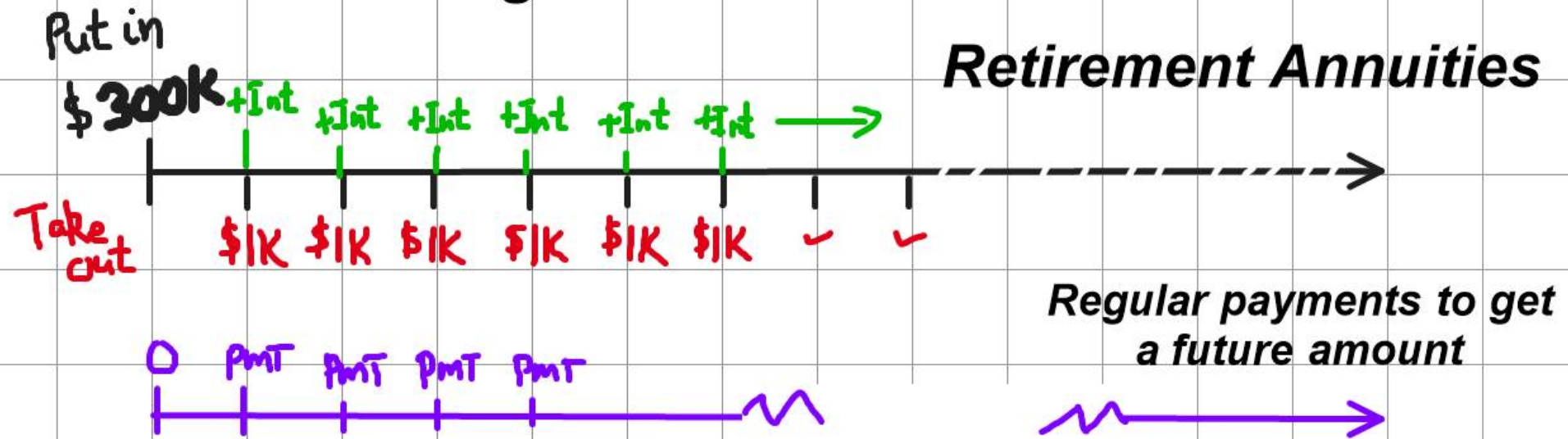
Grade 12
Applied
Unit B
Personal Finance

Annuities

Annuity:

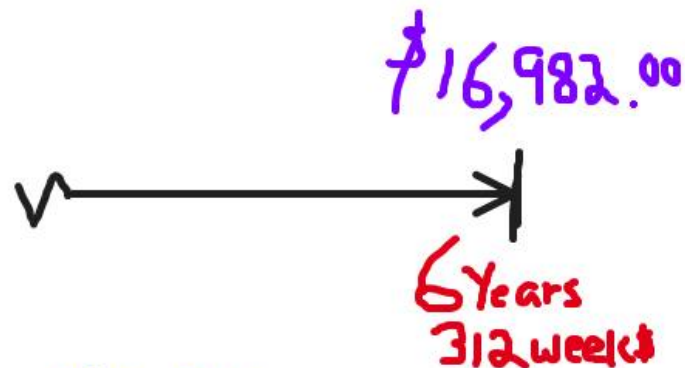
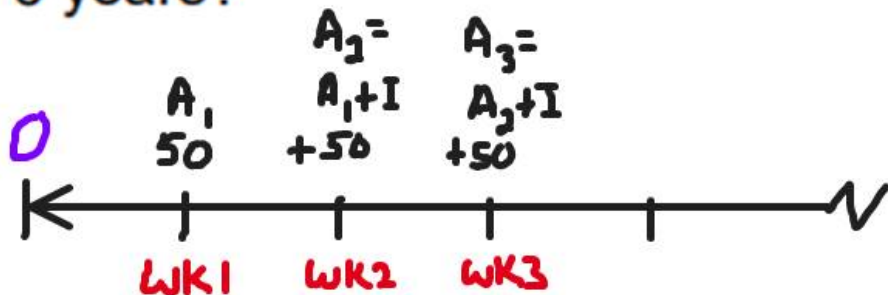
A fixed stream of regular payments

Regular Cash Flow



ANNUITIES

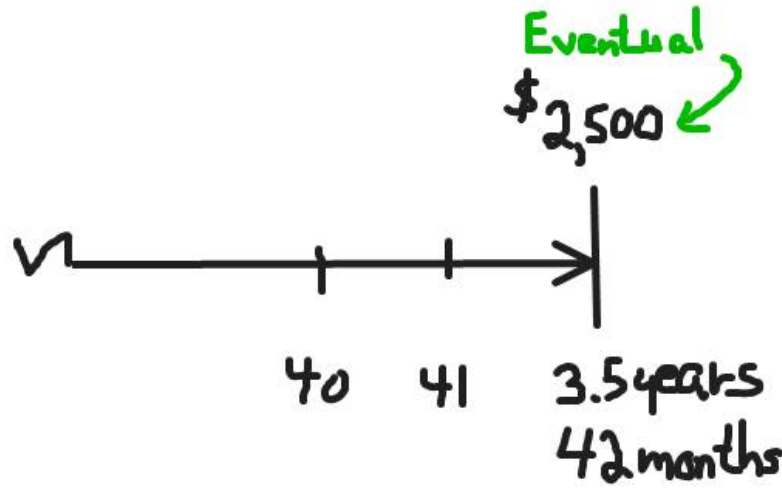
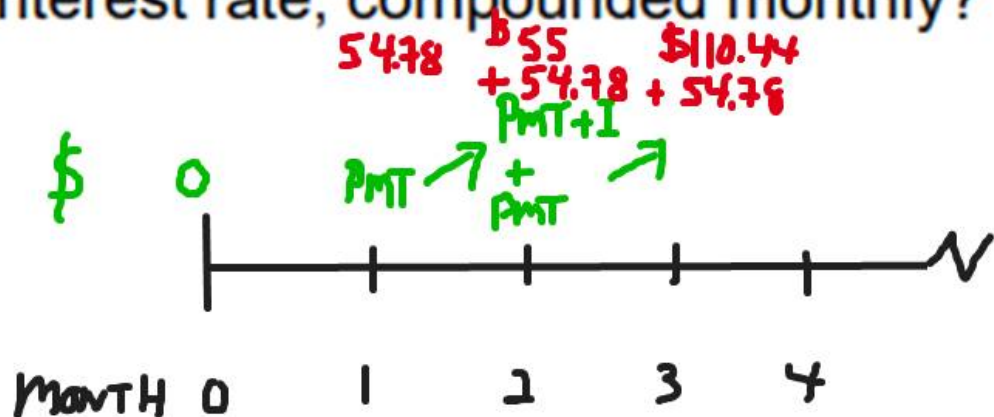
3-1. Josh invests \$50 weekly for 6 years in his savings account that has a 2.8% interest rate, compounded weekly. How much money will he have after 6 years?



```
N=312 ← 6·52
I%=2.8
PV=0 ←
PMT=-50 ✓
FV=16982.00455
P/Y=52 ✓
C/Y=52 ✓
PMT: [ ] BEGIN
```

⇒
N = 312
I% = 2.8
PV = 0
PMT = -50
↓

3-2. Rhonda needs to have \$2500 in three and a half years. What monthly investment will she have to make if her bank offers a 4.8% interest rate, compounded monthly?



```

N=42
I%=4.8
PV=0
PMT=-54.782433
FV=2500
P/Y=12
C/Y=12
PMT: [ ] BEGIN
    
```

← She needs to deposit \$54.78 every month

3-8. Ten years ago, Lanny started investing. He had two choices: invest \$500 monthly or \$125 weekly. His bank offered an interest rate of 4.95%.

- a) Find the present value of both options. $84,055$ vs $77,433$ \hookrightarrow compounded how often
- b) Which option would make Lanny the most money? How much more interest does it make him? weekly \$125 is better. He earns \$6,622 more.

