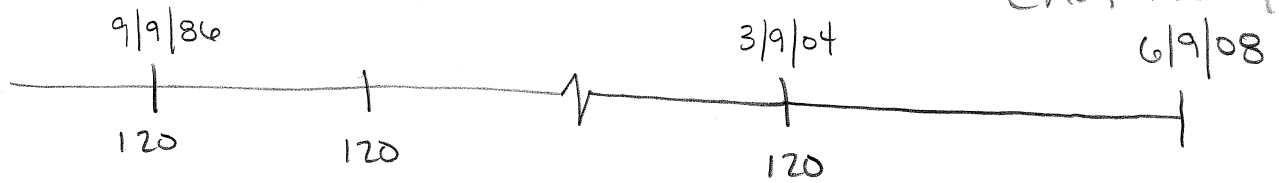


1).



5% (4)

$$S_n = R S_{\overline{n}|i}$$

$$S_{71} = 120 S_{\overline{71}|5/4}$$

$$= 13590.95$$

Value on 6/9/08

$$S = P(1+i)^n$$

$$= 13590.95 \left(1 + \frac{.05}{4}\right)^{17}$$

$$= \$16786.70$$

$$9/9/86 - 3/9/04$$

$$= 17 \text{ yrs. } 6 \text{ mths}$$

$$N = 17(4) + 2 + 1$$

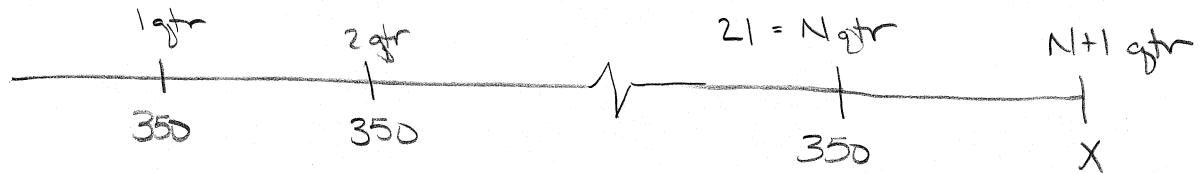
$$= 71$$

$$3/9/04 - 6/9/08$$

$$= 4 \text{ yrs } 3 \text{ mths}$$

$$n = 4(4) + 1 = 17$$

2).

need  
8325

$$S_n = R S_{\overline{n}|i}$$

8325

at 3.5% (4)

$$8325 = 350 S_{\overline{n}|3.5/4}$$

$$n = 21.7023$$

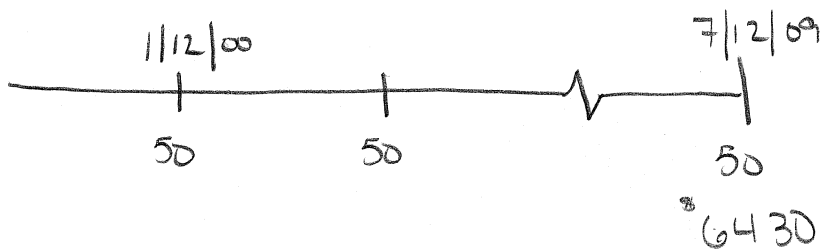
$$S_{21} = 8030.21$$

$$X = 8325 - 8030.21 \left(1 + \frac{.035}{4}\right)^1$$

$$= 224.53$$

21 full payments and a final partial payment  
of \$224.53 at the 22<sup>nd</sup> quarter

3).



1/12/00 to 7/12/09  
= 9 yrs 6 months

$$N = 9(12) + 6 + 1 = 115$$

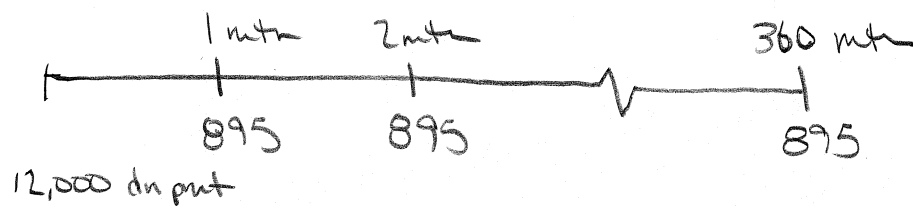
$$S_n = R S_{\overline{n}|i}$$

$$6430 = 50 S_{\overline{115}|i}$$

$$i = .1927$$

$$\boxed{2.312\% (12)}$$

4)



at 4.5% (12)

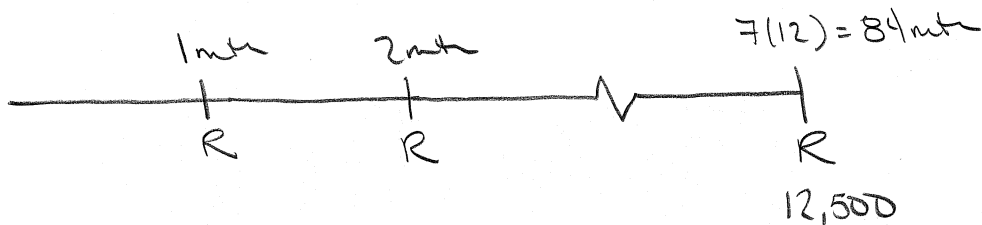
$$A_n = R a_{\overline{n}|i}$$

$$A_{360} = 895 a_{\overline{360}|4.5/12}$$

$$= 176,638.24$$

Can spend \$188,638.24  
on a house

5)



at 4% (12)

$$S_n = R S_{\overline{n}|i}$$

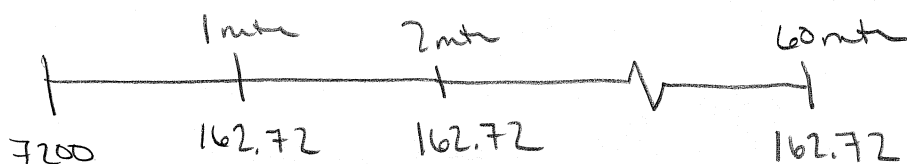
$$12500 = R S_{\overline{84}|4/12}$$

$$\boxed{R = \$129.20}$$

6) need \$7200 w/ 5.25% S.D. loan for 5yrs.

$$S = \frac{P}{(1-d)^t} = \frac{7200}{1-.0525(5)} = \$9762.71$$

$$PMTS = \frac{FV}{N} = \frac{9762.71}{5(12)} = \$162.72$$



$$A_n = Ra \pi i$$

$$7200 = 162.72 a_{\overline{60}|i}$$

$$i = 1.0583$$

APR =

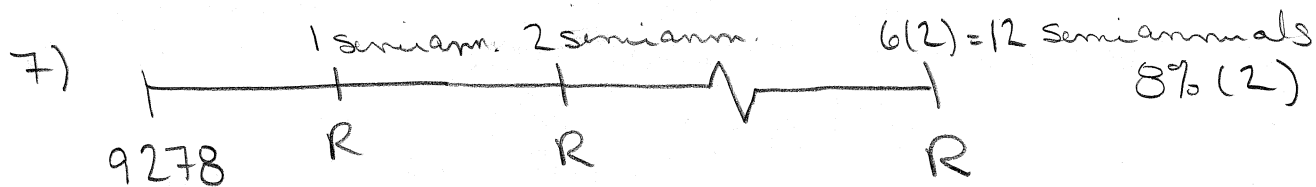
12.700% (12)

payoff in 3yrs. 4 months = 40 months

$$\frac{\text{Rebate}}{9762.71 - 7200} = \frac{1+2+\dots+20}{1+2+\dots+60} = \frac{\frac{1}{2}(20)(21)}{\frac{1}{2}(60)(61)}$$

$$\frac{x}{2562.71} = \frac{210}{1830}$$

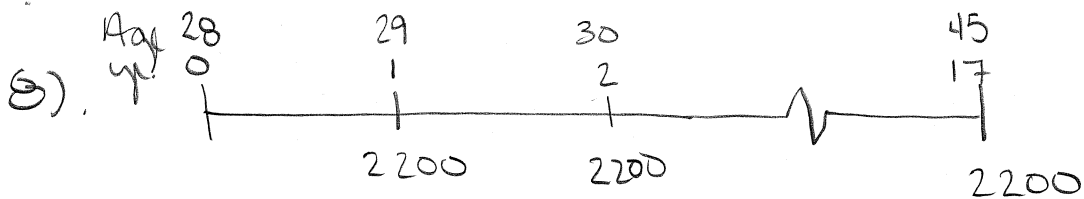
$$x = \$294.08 \text{ rebate}$$



$$A_n = Ra \pi i$$

$$9278 = Ra_{\overline{12}|8/2}$$

$$R = \$988.60$$



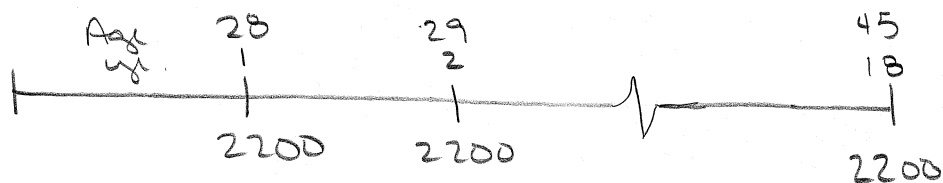
at 7% (1)

$$S_n = R S_{\overline{n}|i}$$

$$S_{17} = 2200 S_{\overline{17}|7\%}$$

$$= 67,848.48$$

inclusive



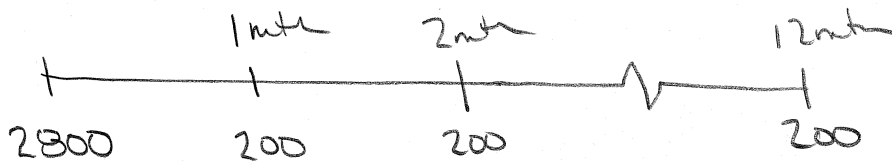
at 7% (1)

$$S_n = R S_{\overline{n}|i}$$

$$S_{18} = 2200 S_{\overline{18}|7\%}$$

$$= 74,797.87$$

9)



$$.2(2800) = 560 \text{ dn pmt}$$

$$A_n = R a_{\overline{n}|i}$$

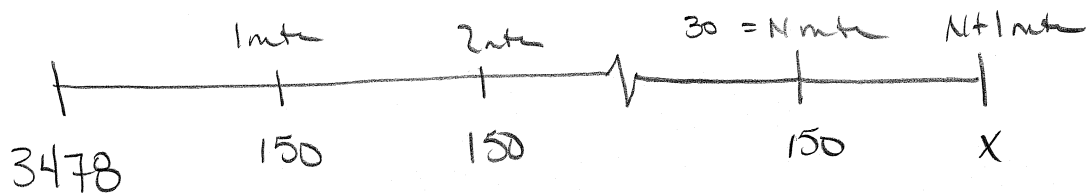
$$2800 - 560 = 200 a_{\overline{12}|i}$$

$$2240 = 200 a_{\overline{12}|i}$$

$$i = 1.0777$$

$$12.9337\% (12)$$

10).



22.9% (12)

$$A_n = R a_{\overline{n}|i}$$

$$3478 = 150 a_{\overline{30}|22.9/12}$$

$$N = 30.907$$

Amt owed after 30<sup>th</sup> payment

$$= 3478 \left(1 + \frac{22.9}{12}\right)^{30} - S_{30}$$

$$S_{30} = 150 S_{\overline{30}|22.9/12}$$

$$= 5998.61$$

$$= \$133.65$$

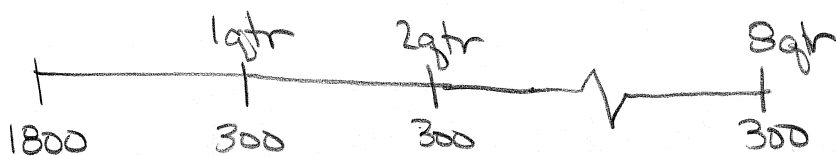
Amt owed at 31<sup>st</sup> payment

$$= 133.65 \left(1 + \frac{22.9}{12}\right)^1$$

$$= \$136.20$$

30 payments of \$150 and one final payment of \$136.20

11).



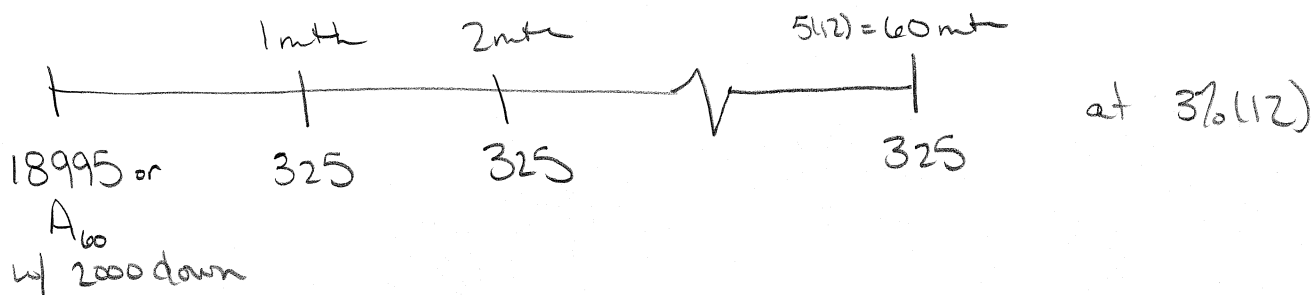
$$A_n = R a_{\overline{n}|i}$$

$$1800 = 300 a_{\overline{4}|i}$$

$$i = 6.876$$

$$27.5067\% (4)$$

12)



$$A_n = R a_{\overline{n}|i}$$

$$A_{60} = 325 a_{\overline{60}|3/12}$$

$$= 18087,02$$

either spend 18995 now  
 or 2000 now w/ payments  
 whose present value is 18087,02

18995 is better than 20,087.02  
 buy cash now