

## Quiz Solns

$$1. \quad I = 700(0.083)(5) \\ = 290.50$$

$$A = 700 + 290.50 \\ = 990.50$$

∴ Sarah has \$990.50

$$2. \quad A = 4500 \left(1 + \frac{0.034}{12}\right)^{48} \\ = 5154.58$$

∴ She owes them \$5154.58

$$3. \quad 1700 = 1000(1+i)^{20}$$

$$20 \sqrt[20]{\frac{1700}{1000}} = 1+i$$

$$0.027 \doteq i$$

$$\text{Rate} = 0.027 \times 4$$

$$\doteq 0.1075$$

∴ She should invest at 10.75%

$$4. \quad PV = 7800 \left(1 + \frac{0.043}{12}\right)^{36} \\ = 6857.58$$

∴ he should invest \$6857.58 now

## Quiz 2 Solns

$$1. A = \frac{250 \left[ \left( 1 + \frac{0.0534}{12} \right)^{48} - 1 \right]}{\left( \frac{0.0534}{12} \right)}$$

$$= 13344.99$$

∴ She will have \$13344.99

$$2. R = \frac{8000 \left( \frac{0.032}{26} \right)}{\left[ \left( 1 + \frac{0.032}{26} \right)^{78} - 1 \right]}$$

$$= 97.78$$

∴ the pmts should be \$97.78

$$3. PV = \frac{300 \left[ 1 - \left( 1 + \left( \frac{0.045}{12} \right) \right)^{-48} \right]}{\frac{0.045}{12}}$$

$$= 13155.88$$

∴ he should deposit \$13155.88 now

4.  $N = 16$   
 $I\% = 6.4$   
 $PV = 30000$   
 $*PMT = \blacksquare$   
 $FV = 0$   
 $P/Y = 2$   
 $C/Y = 2$   
 $PMT: \text{END}$

∴ the pmts are \$2424.99

5.  $N = 60$   
 $I\% = 3.4$   
 $*PV = \blacksquare$   
 $PMT = -450$   
 $FV = 0$   
 $P/Y = 12$   
 $C/Y = 12$   
 $PMT: \text{END}$

∴ the present value is \$24797.49

6.  $N = 364$   
 $I\% = 4.2$   
 $PV = 0$   
 $PMT = -100$   
 $*FV = \blacksquare$   
 $P/Y = 52$   
 $C/Y = 52$   
 $PMT: \text{END}$

∴ She will have \$42296.39