Warm-up Solutions 2.2 + 2.3

2.2 #6

a) $= FV(.03/12, 12*20, 0, 2000) = \$3,641.51$

b) Interest $= \$3,641.51 - 2,000 = \$1,641.51$

c) percentage of the balance
that is interest: $\dfrac{1,641.51}{3,641.51} = .45$ or 45% interest

#8 $= PV(.06/12, 12*8, 0, 6000) = \$3,717.14$

2.3 #4

$\$130/mo$ for 5 years

a) part 1: $= FV(.09/12, 12*5, 130, 0)$

$= \$9,805.14$

part 2: leave the money for 25 more years

$= FV(.09/12, 12*25, 0, 9805.14)$

$= \$92,250.82$

b) interest $= \$92,250.82 - \overset{\text{all deposits}}{130(12)(5)}$

$= \$84,450.82$

c) % interest $= \dfrac{84,450.82}{92,250.82} = .915$

$\approx 92\%$ interest

2.3 #8   = PMT(.10/4, 4*40, 0, 500000)

= $245.20