

MA 110 WORKSHEET (3.2)

Name Solutions

1. Your 24-year-old sister invested her high school graduation money (at age 18). Her \$1000 investment is now worth how much if she has been earning 6.5% compounded monthly?

$$1000(1 + .065/12)^{72} = \$1475.43$$

2. You win \$5,000 from a radio contest, and you decide to invest a portion of your winnings. Assuming you can earn 9% compounded monthly, how much of the \$5,000 should you invest now to accumulate \$10,000 in ten years?

$$10000 = P(1 + .09/12)^{120} \rightarrow P = 10000/(1 + .09/12)^{120} = \$4079.37$$