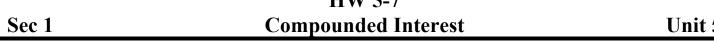
## HW 5-7

Unit 5



- 1. Cami invested \$6,000 dollars into an account that earns 10% interest compounded annually. a. Write and explicit equation for how much money she will have after t years. b. How much money will Cami have in 6 years? Round to the nearest hundredth. 2. Sarah's saving account currently has \$200. She earns 5% interest on her account compounded monthly. a. Write an explicit equation for how much money she will have after t years. b. How much money will Sarah have after 6 months? Round to the nearest hundredth. 3. Paul invested \$400 into an account with a 5.5% interest rate compounded monthly. a. Write an explicit equation for how much money she will have after t years. b. How much will Paul's investment be worth in 8 years? Round to the nearest hundredth. 4. Theo invested \$6,600 at an interest rate of 4.5% compounded monthly. a. Write an explicit equation for how much money he will have after t years.
  - b. How much will Theo's investment be worth in 4 years? Round to the nearest hundredth.

5. Paige invested \$1200 at an interest rate of 5.75% compounded quarterly. a. Write an explicit equation for how much money she will have after ${\pmb x}$ years.
b. How much will Paige's investment be worth in 7 years? Round to the nearest hundredth.
6. Brooke is saving money for a trip to the Bahamas that costs \$295.99. She puts \$150 dollars into a savings account that pays 7.25% interest compounded quarterly. Will she have enough money in the account after 4 years? Explain.
7. Jin's investment of \$4,500 has been losing its value at a rate of 2.5% each year. a. Write an explicit equation for how much money he will have after ${\pmb x}$ years.
b. How much will Jin's investment be worth in 5 years? Round to the nearest hundredth.
8. Santos invested \$1,200 into an account with an interest rate of 8% compounded monthly. James invested \$1,500 into an account with an interest rate of 5% compounded quarterly.  a. Write an explicit equation for how much money <u>Santos</u> will have after <i>x</i> years.
b. Write an explicit equation for how much money James will have after $\boldsymbol{x}$ years.
c. Who will have more money after 5 years?
d. Who will have more money after 7 years?
e. Who will have more money after 10 years?