

## Compound interest

Date \_\_\_\_\_ Period \_\_\_\_\_

- 1) Emily invests \$2,198 in a retirement account with a fixed annual interest rate of 5% compounded 4 times per year. How long will it take for the account balance to reach \$4,867.54?
- 2) Danielle invests \$7,630 in a retirement account with a fixed annual interest rate of 9% compounded 2 times per year. How long will it take for the account balance to reach \$44,378.86?
- 3) Ashley invests \$2,813 in a retirement account with a fixed annual interest rate of 7% compounded 6 times per year. How long will it take for the account balance to reach \$9,844.95?
- 4) Trevon invests \$4,961 in a savings account with a fixed annual interest rate of 2% compounded continuously. How long will it take for the account balance to reach \$5,593.51?
- 5) Mark invests \$1,993 in a retirement account with a fixed annual interest rate of 7% compounded continuously. How long will it take for the account balance to reach \$6,551.15?
- 6) Trevon invests \$7,148 in a retirement account with a fixed annual interest rate of 3% compounded continuously. How long will it take for the account balance to reach \$11,903.50?
- 7) Amanda invests \$3,320 in a savings account with a fixed annual interest rate compounded continuously. After 7 years, the balance reaches \$5,052.91. What is the interest rate of the account?
- 8) Willie invests \$6,560 in a retirement account with a fixed annual interest rate compounded continuously. After 15 years, the balance reaches \$10,288.13. What is the interest rate of the account?
- 9) Bill invests \$6,550 in a savings account with a fixed annual interest rate compounded continuously. After 5 years, the balance reaches \$8,000.19. What is the interest rate of the account?
- 10) Wilbur invests a sum of money in a savings account with a fixed annual interest rate of 7% compounded continuously. After 12 years, the balance reaches \$5,966.96. What was the amount of the initial investment?
- 11) Asanji invests a sum of money in a retirement account with a fixed annual interest rate of 7% compounded continuously. After 17 years, the balance reaches \$26,806.15. What was the amount of the initial investment?

## Answers to Compound interest (ID: 1)

- 1) 16 years
- 5) 17 years
- 9) 4%

- 2) 20 years
- 6) 17 years
- 10) \$2,576

- 3) 18 years
- 7) 6%
- 11) \$8,155

- 4) 6 years
- 8) 3%