DIRECTIONS: Solve. Give monetary answers in dollars and cents (\$###.##). All other answers should be rounded to two decimal places.

1. Five hundred dollars is invested at 7.2% interest compounded quarterly. Determine how much the investment is worth after...

a. 5 years \$714.37 **b.** 10 years \$1020.66 **c.** 15 years \$1458.27 d. 20 years \$2083.49

2. How long would it take to double a \$5000 investment at 4.2% interest compounded quarterly? 16.59 years

3. \$8500 is invested at 5.25% interest compounded monthly. Determine how much the investment is worth after...

a. 3 years \$9946.52 **b.** 42 months \$10,210.49

c. 13 years \$16,794.94 d. 25 years \$31,491.05

4. The value of a new \$18,500 automobile decreases 20% per year. Find its value after...

a. 1 year \$14,800 **b.** 2 years \$11,840

c. 5 years \$6062.08 d. 10 years \$1986.42

5. How long will it take to triple your money if you invest it at a rate of 6.75% compounded quarterly? 16.41 years

6. Bank A offers 6% interest compounded monthly. Bank B offers 6.1% compounded quarterly. If an equal amount of money is invested in both banks, which bank pays more interest per year?

7. A gold coin appreciated in value from \$100 to \$238 in eight years. Find the annual rate of appreciation. 11.45%

8. A tractor cost \$50,000 four years ago. Now it is worth \$41,000. Find the annual rate of depreciation. 4.84%

9. One million dollars is invested at 6.4% interest. Find the value of the investment after three years if the interest is compounded... (some calculators give different hundredths)

a. quarterly

b. monthly

c. weekly

d. dailv

e. hourly

\$1,209,830.41

\$1,211,052.12

\$1,211,527.48 \$1,211,650.12 \$1,211,669.47

10. An investment of \$150,000 is made at 7.5% interest compounded semi-annually. Find the length of the investment if its current value is...

a. \$155,000

b. \$175,000

c. \$200,000

d. \$300,000

0.45 years

2.09 years

3.91 years

9.41 years