

**Question 1 of 6**

A company received a loan of \$22,500 from a bank that was charging interest at a rate of 3.93% compounded quarterly.

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**a.** Calculate the accumulated amount of this loan at the end of 8 years and 9 months.

*Round to the nearest cent*

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**b.** Calculate the interest charged on this loan.

*Round to the nearest cent*

**Question 2 of 6**

Salmon Company, a successful recruitment agency in Montreal, loaned \$12,000 to one of its partners for 13 years. The interest rate charged for the first 6 years was 5% compounded quarterly and 2.3% compounded semi-annually for the next 7 years.

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**a.** Calculate the accumulated value of the loan at the end of the first 6 years.

*Round to the nearest cent*

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**b.** How much should the partner have repaid Salmon Company by the end of 13 years?

*Round to the nearest cent*

**Question 3 of 6**

Meadow Company wants to invest its net profits of \$80,000 for 8 years in either a credit union or a local bank. The credit union provides interest of 9.54% compounded monthly,

while the local bank provides interest of 9.67% compounded semi-annually. Calculate the maturity value of the investment with:

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**a. Credit Union:**

*Round to the nearest cent*

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**b. Local Bank:**

*Round to the nearest cent*

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**c. Which of the two options will yield the highest returns?**

**a. Credit Union**

**b. Local Bank**

#### Question 4 of 6

What amount invested today would yield \$130,000 in 5 years if it were invested at 3.39% compounded semi-annually?

*Round to the nearest cent*

#### Question 5 of 6

If you want to have a million dollars 35 years from today, how much should you invest in your savings account that earns interest of 5.06% compounded monthly?

*Round to the nearest cent*

Question 6 of 6

A manufacturing firm purchased a heavy duty drilling machine. They were given two payment options:

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**Option 1:** Make a payment of \$45,000 immediately to settle the invoice for the machine.

**Option 2:** Make a payment of \$21,000 immediately and the balance of \$23,550 in 3 months to settle the invoice.

If money is worth 4.12% compounded quarterly, answer the following:

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a. What is the total present value of Option 2?

*Round to the nearest cent*

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b. Which option is economically better for the manufacturing firm?

Option 1

Option 2