1. What is credit? Write a definition in your own words. (1 mark)

   borrowing money with the promise to pay it back.

2. Give two examples of where you might need to use credit. (1 mark)

   buy a vehicle
   buy a house

3. Imagine someone has never heard of a credit card before. Explain what it is. (1 mark)

   allows you to purchase without cash, pay it back every month or interest is added on.

4. Borris wants to borrow $8700 from his bank to buy a used tractor. He is offered a 6-year loan at an interest rate of 5.5%.

   a) Calculate his monthly loan payment. (2 marks)

   $8700 \times 16.34 \div 1000 = $142.16$

   b) Calculate the total amount on interest Borris will have paid after he pays off his loan. (2 marks)

   $142.16 \times 6 \times 12 = 10235.52$

   $10235.52 - 8700 = $1535.52
5. Borris wants to reduce the amount of interest he pays to the bank. How much money will he save if he reduces the length of his loan to 4 years? (3 marks)

Loan amount was $8700, interest rate was 5.5%.

\[
\frac{8700 \times 23.26}{100} = \frac{202.36 \text{ per month}}{48} = \frac{9713.28}{10235.52} = 0.95
\]

Saves $522.24

6. On September 14, Carl makes a purchase of $1800 on his credit card. The purchase appears on his monthly statement issued September 19th. Carl does not pay for the purchase by the due date indicated on his September statement. His next monthly statement is issued on October 21st.

Calculate the interest Carl is charged for the purchase on his October statement. Assume his lending institution charges him an annual interest rate of 19.99%. (4 marks)

\[
A = 1800 \left(1 + \frac{19.99}{365}\right)^{37} = 1836.84
\]

\[
I = A - P = 1836.84 - 1800 = 36.84 \text{ interest}
\]
7. The new balance on Dan’s credit card statement is $1289.02. The minimum monthly payment corresponds to at least 5% of the ending balance or $45, whichever is greater. Calculate the minimum monthly payment. (2 marks)

\[
\$1289.02 \times 0.05 = \$64.45 \quad \text{vs.} \quad \$45
\]

8. Ernie’s monthly credit card statement has a previous balance of $1638.92. The statement indicates that Ernie made a payment of $1200 during the month and purchased more goods totaling $1876.07. Assume his interest charges for the month are $41.68. Calculate Ernie’s new balance. (2 marks)

\[
1638.92 - 1200 + 1876.07 + 41.68 = \$2356.67
\]

9. Brad just got a credit card from Sears. Because he didn’t pay attention in math class, he used it until it stopped working. His credit limit was $8,000.

a) Why do you think Brad’s card stopped working? (1 mark)

reached his $8,000 credit limit.

b) Explain to Brad the meaning of the word “balance” when talking about credit cards. (1 mark)

money he owes.
10. Brad ignores the first statement he receives. How much interest will be added to his balance of $8000 if the annual interest rate is 19.99%, and the time used to calculate his interest is 62 days? (3 marks)

\[ I = Prt \]
\[ = 8000 \left( 1 + \frac{0.1999}{365} \right)^{\frac{62}{365}} - 8000 = \$276.23 \]

11. Give Brad two pieces of advice/wisdom that will help him with his credit card. (2 marks)

- Pay balance every month
- Need vs. want

12. Many stores offer financing. Explain what is meant by “financing”. (1 mark)

Offer you credit, charge you interest/fees.

13. Gil is buying a new couch. The cash price is $1653.99, or he can take advantage of the store promotion: “24 easy monthly payments of $85.00!”.

If Gil chooses the store promotion, what annual rate of interest will he pay for the couch? (4 marks)

\[ 24 \times 85 = \$2040 \] (1)
\[ 1653.99 \] (1)
\[ \frac{386.01 \text{ extra}}{386.01} \times 100 = 11.669 \% \] (2)
\[ 11.7 \% \]
\[ r = \frac{2040}{1653.99 \times 2} \] (1)

Your options are:

Option 1: 15% down payment and then 6 monthly payments of $120
Option 2: no down payment and then 24 monthly payments of $45.00

Which payment plan offers the lowest interest rate? (6 marks)

<table>
<thead>
<tr>
<th>Option 1</th>
<th>$729.98</th>
<th>vs</th>
<th>Option 2</th>
<th>$729.98</th>
</tr>
</thead>
<tbody>
<tr>
<td>$169.50</td>
<td>$0</td>
<td></td>
<td>$829.50</td>
<td>$1680</td>
</tr>
<tr>
<td>$6 \times 120 = $720</td>
<td>$24 \times 45 = $1680</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>$829.50</td>
<td>(1)</td>
<td></td>
<td>$1680</td>
<td></td>
</tr>
<tr>
<td>Extra $99.52</td>
<td>(1)</td>
<td>$350.02</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rate $\frac{99.52}{729.98 \times 0.5} = 27.3%$</td>
<td>$\frac{350.02}{729.98 \times 2} = 24.0%$</td>
<td>$\frac{27.3%}{24.0%}$</td>
<td>$\text{Lower}$</td>
<td></td>
</tr>
</tbody>
</table>

15. Complete the following chart that compares several different sources of credit. Jot down the approximate interest rate and when it makes sense to use that source of credit. (3 marks)

<table>
<thead>
<tr>
<th>Bank or Credit Union Personal Loan</th>
<th>Bank Credit Card</th>
<th>In-Store Credit Card</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interest Rate</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.95%</td>
<td>19.99%</td>
<td>29.99%</td>
</tr>
<tr>
<td>Car</td>
<td>Shopping</td>
<td>Specifications?</td>
</tr>
</tbody>
</table>