Example 2: Daphne is charged 18.95% per annum on her credit card balances. She used her card, which had no previous balance, to make a purchase of $2198.95. She did not use the card again before her statement dated April 29.

On May 2, Daphne paid the minimum payment of 5%.

On May 6, Daphne took a cash advance of $95.10 on her credit card.

If she makes no other transactions, how much will Daphne owe on her May 29 statement?

\[
\text{Payment} = \frac{2198.95 \times 5}{100} = 109.95
\]

\[
\text{May 2 Balance} = 2198.95 - 109.95 = 2089.00
\]

\[
\text{Interest on 2089.00}
\]

\[
\text{APR. 30} \rightarrow \text{MAY 29} \rightarrow 30 \text{ DAYS}
\]

\[
\text{I} = \text{Prt} = (2089)(0.1895)(\frac{30}{365}) = 32.54
\]

\[
\text{Cash Advance Interest}
\]

\[
\text{I} = \text{Prt} = (95.10)(0.1895)(\frac{24}{365}) = 1.18
\]

\[
\text{Balance} = 2089 + 32.54 + 95.10 + 1.18 = 2217.82
\]
Example 3: Zaynab is buying a new stove, listed at $989.95. The store has an offer of "Nothing down, and 4 easy monthly payments of $265.00."

a) What is the total cost of the stove on the payment plan?

b) Use the simple interest formula to calculate what rate of interest is being charged.

\[
\text{Cost} = 4 \text{ payments of } 265.00 \\
4 \times 265.00 = \$1060
\]

\[
\text{DIFF.} \\
1060 - 989.95 = \$70.05
\]

\[
I = Pr + \\
70.05 = (989.95)(r)(4/12)
\]

\[
\frac{70.05}{989.95} = \frac{r}{4/12}
\]

\[
0.0707611496 = r \times (4/12)
\]

\[
0.0707611496 \approx r \times (0.333333333) \\
\frac{0.0707611496}{0.333333333} \approx \frac{r}{0.333333333}
\]

\[
r = 0.21228 \times 100 = 21.23\% 
\]