

Name of Student:
Assignment No:

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Question No.1

The list price for a radio is 22% higher than its net price. If the net price is \$29.00, what is the list price? What is the amount of the trade discount?

Answer- 1

Net price of Radio= \$29
List price is 22 % higher
i.e. List price/ Net price = 122/100
Therefore List price = 122/100 * 29
The calculation is accomplished as below:

List Price	\$	35,38
Net Price	\$	29,00
Trade discount (amount)	\$	6,38
Trade discount (percentage)		18,03%

Question No.2

A certified public accountant discounts a bill to \$294.00 when a client pays in cash, within 10 days. If the cash discount is 1.5%, how much would the customer have paid if he or she had not been eligible for the discount? Report the result to the nearest penny.

Answer- 2

Discount = Bill amount * 1.5/100
Bill amount = Discounted value + Discount = Discounted amount + Bill amount * 1.5/100
Discounted value = Bill amount (1-1.5/100) = Bill amount * 98.5/100
or: Bill amount = Discounted value * 100/98.5

The above calculation is accomplished in Excel worksheet as below:

Un-discounted bill	\$	298,48
Percentage discount		1,50%
Discounted bill amount	\$	294,00
Amount of discount	\$	4,48

Question No.3

Bill's Accounting is taking out a lease on \$2,000 worth of computing equipment and office furniture, over a two year period. The bank charges 8.25% interest annually. Compute the interest paid and the total amount paid for the lease.

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Answer- 3

Principal repaid at the end of the period

Principal for first year as well as second year = \$ 2000
Annual Interest is calculated by the formula: $I = P * r / 100$
Where 'r' is the annual rate of interest
Here 'r' = 8.25
Therefore annual interest of \$ 2000 is: $2000 * 8.25/100 =$
Interest for 2 years = Annual interest * 2

The above calculation is accomplished in Excel worksheet as below:

Amount of loan	\$ 2 000,00
Annual interest	\$ 165,00
Interest for 2 years	\$ 330,00
TOTAL AMOUNT PAYABLE	\$ 2 330,00

Question No.4

You need to borrow \$5,000 for 2.33 years. Originally, the bank offers a 6.5% rate. Then, after some negotiation, they are willing to drop the rate to 5.5%. What savings in interest will you have as a result of the rate reduction?

Answer- 4

Annual Interest is calculated by the formula: $I = P * r / 100$
Where 'I' is the interest amount and 'r' is the annual rate of interest
Here 'r' = 6.5 in one case and 5.5 in the other case

Principal amount	\$ 5 000,00
Period (Years)	2,33
Original interest rate (Percent)	6,50%
Negotiated interest rate (Percent)	5,50%

Annual interest (case-1) = $5000 * 6.5 / 100 =$ Say 'x'
Interest for 2.33 years = 'x' * 2.33
Annual interest (case-2) = $5000 * 5.5 / 100 =$ Say 'y'
Interest for 2.33 years = 'y' * 2.33

Calculation in Excel Worksheet

		Annual Int. 6,50%	Annual Int. 5,50%	Annual savings	Savings for 2.33 years
Principal amount	\$ 5 000,00	\$ 325,00	\$ 275,00	\$ 50,00	\$ 116,50

Question- 5

A consumer loan is made at 10.0% over a 3.5 year period. If \$2,125 in interest is paid, what is the principal? What is the total amount paid by the consumer? Report the results to the nearest penny.

Answer- 5

The amount payable against a loan taken on simple interest is given by the following equation

$$I = P * r / 100 * n$$

Where

P is the principal

r is the rate of annual interest, and

n is the period in years

Based on above equation ' P ' = { ' I ' / (r/ 100)} / n = (100 * ' I ' / r) / n

i.e.: = 'I' * {(100 * 2125 / (10/100))} / n = 2125 * 10 / 3.5

Principal amount (?) = 'P'

Rate of interest= 10% p.a

Period of loan= 3.5 years

THE ABOVE IS ACCOMPLISHED IN EXCEL AS BELOW:

Rate of interest	10,00%
Period of loan (years)	3,50
Interest paid	\$ 2 125,00
Principal amount (?) = 'p'	\$ 6 071,43