L6 : Profit-Loss

1-Tut : Man And Cycle

Send Feedback

A man buys a cycle for Rs. 1400 and sells it at a loss of 15%. What is the selling price (in Rs.) of the cycle?

Options

This problem has only one correct answer

1202
1190
1160
1000

Correct Answer : B

Solution Description

Selling price=
Cost price – Loss= 1400-1400×(15/100)=1400-210=Rs.1190.

Hence, option (2) is correct.

2-Tut : Retailer And Radio

Send Feedback

A retailer buys a radio for Rs. 225. His overhead expenses are Rs.15. He sells the radio for Rs. 300. The profit per cent of the retailer is :

Options

This problem has only one correct answer

25%
26.67%
20%
33.33%

Correct Answer : A

Solution Description

Total cost price= Rs. 225+ Rs. 15= Rs. 240.

Percentage profit= (60/240)×100=25% profit. Hence, option (1) is correct.

3-Tut : Tradesman And Goods

Send Feedback

A tradesman marks his goods 10% above his cost price. If he allows his customers 10% discount on the marked price, how much profit or loss does he make, if any?

Options

This problem has only one correct answer

1% gain
1%loss
5% gain
No gain, no loss

Correct Answer : B

Solution Description

Let the cost price is Rs. 100.

Marked price= Rs. 100+ 10% of 100= Rs. 110.

Selling price= 110- 10% of 110= Rs.99.

Net loss= 100- 99= Rs. 1.

Percentage loss= (1/100)×100=1% loss. Hence, option (2) is correct.

4-Tut : Trade And Goods

Send Feedback

A trader marks his goods 45% above the cost price and gives a discount of 20% on the marked price. The gain % on goods he makes is :

Options

This problem has only one correct answer

15%
14%
29%
16%

Correct Answer : D

Solution Description

Let the cost price= Rs. 100.
Marked price= 100+ 45% of 100= Rs. 145.
Selling price= 145- 20% of 145= Rs. 116.

Percentage gain= (116-100)/100×100=16%. Hence, option (4) is correct.

5-Tut : Shopkeeper And Chair

Send Feedback

A shopkeeper purchased a chair marked at Rs.800, at two successive discounts of 10% and 15% respectively. He spent Rs.28 on transportation and sold the chair for Rs.800. His gain percent is :

Options

This problem has only one correct answer

40%
30%
25%
14%

Correct Answer : C

Solution Description

Two successive discounts of 10% and 15% is equivalent to 10+15-((10×15)/100)=23.5%.

After two successive discounts of 10% and 15% shopkeeper get the chair at 800- 23.5% of 800= Rs. 612.

But he had to pay Rs. 28 on transportation. Hence, the net cost price=612+ 28= Rs. 640.

Selling price= Rs. 800

Net profit= 800- 640= Rs. 160.

Percentage profit= (160/640)×100=25%. Hence, option (3) is correct.

6-Tut : Better to Customer

Send Feedback

Which of the following successive discounts is better for a customer?

(a) 20%, 15%, 10% or

(b) 25%, 12%, 8% ?

Options

This problem has only one correct answer

(a) is better
(b) is better
(a) or (b) (both are same)
None of these

Correct Answer : B

Solution Description

Let's check both the given discount schemes one by one:

(a) 20%, 15% and 10%.
If the marked price is Rs. 100----(-20%)---->80----(-15%)------>68----(-10%)---->61.20
Net discount= 100- 61.20= Rs.38.80.

(b) 25%, 12%, 8%
If the marked price is Rs. 100----(-25%)---->75----(-12%)------>66----(-8%)---->60.72
Net discount= 100- 60.72= Rs.39.28.

(b) gives a better discount than (a) hence, b is better. Hence, option (2) is correct.

7-Tut : Interest per Annum

Send Feedback

In what time will Rs. 500 give Rs. 50 as simple interest at the rate of 5% per annum?

Options

This problem has only one correct answer

2 years
3 years
4 years
5 years

Correct Answer : A

Solution Description

50 = ((500*5*t)/100)=>t=2 years

8-Tut : Rate Of Interest

Send Feedback

A sum of 1600 gives a simple interest of 252 in 2 years and 3 months. The rate of interest per annum is:

Options

This problem has only one correct answer

11/2%
8%
7%
6%

Correct Answer : C

Solution Description

Interest per annum= 252/2.25= Rs.112
Interest rate= (112/1600)*100=7% per annum.

Hence, option (c) is correct.

9-Tut : Calculate R.O.I?

Send Feedback

A sum of Rs.10,500 yields an interest of Rs.3150 in 5 years at a certain rate of simple interest. What is the rate of interest?

Options

This problem has only one correct answer

4%
5%
6%
None Of These

Correct Answer : C

Solution Description

Required rate of interest= (3150×100)/(10500×5)=6.0% per annum. Hence, option d is correct.

10-Tut : Ashok And Loan

Send Feedback

Ashok took a loan of Rs.10000 with simple interest for as many years as the rate of interest. If he paid Rs.625 as interest at the end of the loan period, what was the rate of interest?

Options

This problem has only one correct answer

2
2.5
5
Cannot be determined

Correct Answer : B

Solution Description

Let the interest rate and the time be x% per annum and x years respectively.

(10000*x*x)/100=625

x^2=(625/100) or x=25/10=2.5% per annum.

11-Tut : Total Sum

Send Feedback

A sum fetched a total simple interest of Rs.420 at the rate of 3% per annum in 14 years. What is the sum?

Options

This problem has only one correct answer

Rs 1000
Rs 800
Rs 900
None Of These

Correct Answer : A

Solution Description

Let the sum be Rs. x.

Interest for the sum for 14 years= Rs. 420

x*(3/100)×14=420

0.42x=420

x=Rs. 1000

12-Tut : Amount Increase

Send Feedback

X lent Rs. 1000 to Y for 3 years and Rs. 2000 to Z for 6 years on simple interest at the same rate of interest and received Rs.2250 in all from both of them as interest. The rate of interest per annum is :

Options

This problem has only one correct answer

12.5%
15%
17.5%
None Of These

Correct Answer : B

Solution Description

Let the rate of interest be r% per annum. According to the question:

$1000\times(r/100)\times3+2000\times(r/100)\times6=2250$

By solving the above equation we get: r= 15% per annum.

13-Tut : Calculate Principal?

Send Feedback

The principal, which will amount to Rs. 270.40 in 2 years at the rate of 4% per annum compound interest, is (in Rs.)

Options

This problem has only one correct answer

200
225
250
220

Correct Answer : C

14-Tut : Calculate CI?

Send Feedback

The compound interest (in Rs.) on Rs. 2000 in 2 years if the rate of interest is 4% per annum for the first year and 3% per annum for the second year, will be

Options

This problem has only one correct answer

142.40
140.40
141.40
143.40

Correct Answer : A

Solution Description

Principal amount= Rs. 2000

Amount after 1 year= 2000+ 4% of Rs. 2000= Rs. 2000+ 80

Amount after 2 years= Rs. 2000+ 80+ 3% of Rs. 2000+ 80= Rs. 2000+ 80+ 60+ 2.4= Rs. 2142.40

Required interest= Rs. 2142.40- 2000= Rs. 142.40. Hence, option (a) is correct.

15-Tut : Find CI?

Send Feedback

Find the compound interest on Rs. 5000 at a rate of 10% per annum for 1.5 years, compounded half yearly.

Options

This problem has only one correct answer

Rs. 750
Rs. 788.125
Rs. 780
None Of These

Correct Answer : B

Solution Description

Interest rate= 10% per annum or 5% per half year.
Time= 3 half years
Total amount after 1.5 years=5000[1+(5/100)]^3=Rs.5788.125

C.I. = Rs. (5788.125- 5000)= Rs. 788.125. Hence, option b is correct.

16-Tut : Compounded Quarterly

Send Feedback

Find the compound interest on Rs. 8000 at a rate of 20% per annum for 9months, compounded quarterly.

Options

This problem has only one correct answer

Rs 1261
Rs 1200
Rs 1161
None Of These

Correct Answer : A

Solution Description

Interest rate= 20% per annum or 5% per quarter.
Time= 3 quarters.
Total amount after 1.5 years= 8000[1+(5/100)]^3=
8000×((21/20) ×(21/20)x(21/20))=Rs. 9261

Compound interest = Rs. (9261- 8000)= Rs. 1261. Hence, option a is correct.

17-Tut : Sum Of Money

Send Feedback

The difference between simple interest and compound interest of a certain sum of money at 20% per annum for 2 years is Rs. 48. Then the sum is (in Rs.)

Options

This problem has only one correct answer

1000
1200
1500
2000

Correct Answer : B

Solution Description

Difference between simple and compound interest for a period of 2 years= (p*r^2)/100, where P is the principal amount and r is the rate of interest.
p(r/100)^2=48
r= 20% per annum.
p(20/100)^2=48

P= Rs.1200. Hence, option (c) is correct.

18-Tut : Find SI?

Send Feedback

If the compound interest on a certain amount at 20% per annum for 3 years is Rs. 1092 then find the simple interest on the same amount at the same interest rate and for the same period.

Options

This problem has only one correct answer

Rs 1200
Rs 900
Rs 1100
None Of These

Correct Answer : B

Solution Description

Let the principal amount is Rs. ‘p’, then according to the question:
p(1+r/100)^3-p=1092
(216/125)p-p=1092
91p/125=1092
p=Rs. 1500

Simple interest= (1500×20×3)/100=Rs. 900

19-Tut :