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| **PROFIT & LOSS** |

**Cost Price (C.P): The price at which an article is purchased, is called its cost price.**

**Selling Price (S.P): The price at which an article is sold, is called its selling price.**

**Profit or Gain = SP – CP Loss = CP – SP**

**Profit percentage or loss percentage is always calculated on cost price only.**

**Profit percentage = (Profit/CP) x 100% Loss percentage = (Loss/CP) x 100%**

1. **A man buys a toy for Rs250 and sells it for Rs300. Find his profit?**

Profit = Rs300 – Rs250 = Rs50

1. **A man purchases an article for Rs500 and sells it for Rs450. Find his loss?**

Loss = Rs500 – Rs450 = Rs50

1. **A man buys an article for Rs250 and sells it for Rs300. Find his gain percent?**

Profit = 300 – 250 = Rs50

Profit percent = (50/250)100 = 20%

1. **A man buys a pen for Rs250 and sells it for Rs200. Find his loss percent?**

Loss = 250 – 200 = Rs50

Loss percent = (50/250)100 = 20%

1. **Harish bought a pre-used laptop for Rs12000 and spent Rs2000 on its repairs. He sold it for Rs16800. Find his profit percent?**

Total Cost Price = 12000 + 2000 = Rs14000 and SP = Rs16800

SP > CP, profit = Rs2800 profit percent = (2800/14000)100 = 20%

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| 1. **A man buys an article for Rs275 and sells it for Rs286. Find his gain percent?**   4% is the answer   1. **If a mobile phone is purchased for Rs4900 and sold for Rs4655, find the loss percent?**   5% is the answer |

1. **Find SP, when CP = Rs5625 and gain = 20%**

100 …………..5625

120……………? (120 x 5625)/100 = Rs6750

1. **Find SP, when CP = Rs8040 and loss = 15%**

100 ………….8040

85………………? (85 x 8040)/100 = Rs6834

1. **Find CP, when SP = Rs4060 and gain = 16%**

116…………..4060

100………….? (100 x 4060)/116 = Rs3500

1. **Find CP, when SP = Rs5170, loss = 12%**

88……………5170

100………….? (100 x 5170)/88 = Rs5875

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| 1. **When a commodity is sold for Rs3480, there is a loss of 25%. What is the cost price of the commodity?**   Rs4640 is the answer   1. **A man sold an item for Rs1980 and gaining 10%. The item was bought for:**   Rs1800 is the answer   1. **A loss of 5% was suffered by selling an item for Rs4085. Find the cost price of the item?**   Rs4300   1. **Find the CP of an article which is sold at a loss of 25% for Rs1500?**   Rs2000   1. **A man buys 10 articles for Rs800 and sells them at the rate of Rs125 per article. Find his gain percent?**   56 ¼% is the answer   1. **An umbrella marked at Rs80 is sold for Rs68. Find the rate of discount?**   15% is the answer |

1. **By selling a watch for Rs1440 a man loses 10%. At what price should he sell it in order to gain 15%?**

90………..1440

115………..? (115 x 1440)/90 = Rs1840

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| 1. **By selling a watch for Rs1140, a man loses 5%. For how much should he sell it to gain 5%?**   Rs1260 is the answer   1. **On selling an article for Rs240, a trader loses 4%. In order to gain 10%, he must sell that article for:**   Rs275 is the answer   1. **A retailer buys furniture for Rs22500. His overhead expenses are Rs1500. He sells the furniture for Rs30000. The profit percent of the retailer is:**   25% is the answer   1. **If the selling price of an article is (4/3) times its cost price, the profit percent is:**   33.33% is the answer   1. **There would be 10% loss if a toy is sold at Rs1080 per piece. At what price should it be sold to earn a profit of 20%?**   Rs1440 is the answer |

1. **By selling an article for Rs1950, a dealer makes a profit of 30%. By how much should he increase his selling price so as to make a profit of 40%?**

130…………….1950

140……………….? (140 x 1950)/130 = Rs2100

Difference = 2100 – 1950 = Rs150

1. **If books bought at prices ranging from Rs200 to Rs350 are sold at prices ranging from Rs300 to Rs425, what is the greatest possible profit that might be made in selling 8 books?**

Greatest profit is possible when the CP is minimum and the SP is maximum.

Least CP = 200 x 8 = Rs1600

Greatest SP = 425 x 8 = Rs3400

Required profit = 3400 – 1600 = Rs1800

1. **A trader lost 20% by selling a watch for Rs1024. What percent shall he gain or lose by selling it for Rs1472?**

1024………….80

1472…………? (1472 x 80)/1024 = 115 15% profit

1. **The original price of a TV set is Rs90000. The price is discounted by 20% and then raised by 10%, what is its new price?**

New price = 110% of 80% of Rs90000 = (110/100)(80/100)(90000) = Rs79200

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| 1. **If the selling price of 10 articles is the same as the cost price of 11 articles, then find gain percent?**   10% is the answer |

1. **A mobile dealer marks a mobile with a price which is 20% more than the cost price and allows a discount of 10% on cash. Find his gain percent?**

Marked price = 20% more than cost price = 120

Discount = 10% of 120 = 12

Selling price = 120 – 12 = 108

Gain% = 108 – 100 = 8%

1. **A dishonest dealer professes to sell his goods at cost price, but he uses a weight of 960 grams for a kilogram. Find his gain percent?**

Let the cost price of 1 kg = Rs100 and cost price of 960 grams = Rs96.

But selling price of 960 grams = Rs100

Profit =100 – 96 = Rs4

Gain percent = (4/96)(100) = (25/6)%

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| 1. **Cost price = Rs480, gain = 25%, selling price = ?**   Rs600 is the answer   1. **Selling price = Rs990, loss = 10%, cost price = ?**   Rs1100 is the answer |

1. **How much percent above the cost price should a shopkeeper mark his goods so that after allowing a discount of 10%, he gains 26%?**

After allowing 10% discount (90/100)x = 126 implies x = (126 x 100)/90 = Rs140

1. **By selling 200 oranges, a man gains the selling price of 40 oranges. Find his gain percent?**

We know that SP = CP + Profit

SP (200) = CP (200) + SP (40) SP (160) = CP (200)

Implies that (SP/CP) = (200/160) Gain = 200 – 160 = 40

Gain percent = (40/160)(100) = 25%

1. **A man purchased a watch for Rs4000 and sold it at a gain of 20% of the selling price. Find the selling price of the watch?**

Let the SP = 100x We know that SP = CP + P

100x = 4000 + 20x On solving x = 50

Therefore SP = 100 x 50 = Rs5000

1. **By selling a table for Rs300 instead of Rs400, 5% more is lost. Find the cost price of the table?**

5 percent makes difference = Rs100

100 percent (cost price) implies ………..? (100 x 100)/5 = Rs2000

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| 1. **If 5% more is gained by selling an article for Rs3500 than by selling it for Rs3400, find the cost price of the article?**   Rs2000 is the answer   1. **The selling price of 12 articles is equal to the cost price of 15 articles. Find the gain percent?**   25% is the answer   1. **If the cost price of 15 tables be equal to the selling price of 20 tables. Find the loss percent?**   25% is the answer   1. **By selling 36 bananas, a vendor loses the selling price of 4 bananas. His loss percent is:**   10% loss is the answer   1. **By selling 100 bananas, a fruit seller gains the selling price of 20 bananas. Find his gain percent?**   25% is the answer   1. **A man sells 320 mangoes at the cost price of 400 mangoes. His gain percent is:**   25% is the answer   1. **If the selling price of 18 articles is equal to the cost price of 21 articles. Find the loss or gain percent?**   16.66% profit |