# Chapter 8: Comparing Quantities

**Question 1**

If a % is the discount on the marked price y, the discount is

a) (y/a) ×100

b) (a/y) ×100

a) (y/100) ×a

a) (100/year)

**Question 2**

X Bought a X box at Rs 35000 and sold it to Y. Y in turns sold it to Z. Both X and Y made 20% profit. Which one of the following is true?

a) X and Y earn the same profit

b) X earned more profit Y

c) X earned less profit then Y

d) Cannot be determined

**Question 3**

 Find the following:

(I) 50 % of 140   (ii) 30 % of $ 750         (iii) 16.5 % of 4000 kg

(iv) $2^1/_2$ % of 80 l

(v) 0.8 % of 8 km         (vi) 150 % of 1000

(vii) 12 % of 360 m     (viii) $2^2/_7$ % of 7 l

(ix) 0.8 % of 250 g

(x) 3/4 % of $ 780

**Question 4**

True and False statement

a) C.P = M.P – Discount

b) Discount is the reduction given on Marked price of the article

c) If a discount x is available on the marked price y of the article, then discount % is (x/y) ×100

d)  Simple interest is always less than compound interest for the same principle, same interest rate and same time period (>1)

e) Sales tax is computed over the Selling price of the article and added to the bill of the customer

**Question 5**

The list price of an article is 100Rs.If you get a price discount of 15% and pay 5% for tax, what is the actual cost of your article?

**Question 6**

In a Movie complex 75 % of seats were filled.  If there were 600 seats in the hall, how many seats were vacant?

Question 7

A real estate agent earns Rs 50000 as commission on the sale of the property. If the commission is 4% of the selling price. What is the selling price of the?

**Question 8**

A Woman earns Rs 100000 per month and spends 65 % of it. How much money does she save every month?

**Question 9**

To clear his stock a Lifestyle offers a discount of 50 %. Find the discount on goods worth Rs1500?

**Question 10**

The population of a city increased from 60000 to 62500. What is the increase percent?

**Question 11**

An alloy of iron and zinc contains 40 % of iron and the rest is zinc. Find the weight of the zinc in 3 kg of the alloy?

**Question 12.** In an exam, 85 % of the children pass. Find the number of children who passed, if there were 1700 children.

**Question 13**

Jatin got 10% increase in his salary. If his new salary is 55000, find his previous salary.

**Question 14**

The enrollment in a Government school increased by 15 % from the year 2014 to 2015. If 1500 enrolled in 2014, how many enrolled in 2015.

**Question 15**

For an amount x, explain why 20% increase followed by the 20% decrease is less than original amount x

**Question 16**

By what number must the given number be multiplied to increase the number by 10%?

**Question 17**

The price of oil rises from Rs120 per litre to Rs 150 per litre. Find the percentage rise in the price of oil?

**Question 18**

The population of a small locality in Gurgaon was 1000 in 2014 and became 1500 in 2015. By what percent did the population increases?

**Question 19**

Out of a salary of Rs 75000, I kept 1/3 as savings. Out of the remaining money, I spend 25 % on food and 40 % on house rent. How much do I spend on food and house rent?

**Question 20**

A big mega store is having a festival sale and all the items are having 25% discount.

Vivek is having a Rs 50 Gift card and he has chosen a game whose marked price is Rs 300. Now Vivek is confused how to calculate the discount and what remaining money need to be paid to the clerk

The sales clerk has suggested two ways to calculate the concession

Method 1: Subtract Rs 50 from Marked price and then take 25% discount on the remaining amount

Method 2: Take 25% discount on the Marked price and then subtract Rs 50 from it

Now the questions for you

a) Do you think both the method will give same result? If not predict which method will be beneficial to him

b) Calculate the amount Vivek has to pay to the clerk in each case

c) What method do the store actually uses? And why?

**Question 21**

Rina gets 94 marks in her exams. These are 47% of the total marks. Find the maximum number of marks.

**Question 22**

A tank can hold 50 liters of water. At present, it is only 30 % full. How many liters of water shall I pit in the tank, so that it is 50 % full?

**Question 23**

In case of gain on the selling of product.

Selling price is defined as

S. P= [1+ (Gain%/100)] × C.P

Which check if this is true

**Question 24**

Fill in the blank

1) Five times a number is a _____ % increase in the number

2) The cost price of 10 cardboards is same as Selling price of 5 cardboards. The profile % in this transaction is _____

3) The discount on an item is calculated on the _____ of the item

4._____ is charged on the sale of an item by government   and is added to the bill amount

**Question 25**

An income is 20 % more than B. How much percent is B income less than A?

**Question 26**

Find the following

1) MP =Rs 1000, Discount 10%, SP=?

2) SP =Rs 80, Discount 10%, MP =?

3) MP=Rs 625, SP=Rs 562.50, Discount%=?

**Question 27**

Sachin bought a pair of Reebok shoes at a sale of 25%. If the amount he paid was Rs 2000, find the marked price.

**Question 28**

In an election, there are a total of 60000 voters and there are two candidates, A and B. 60 % of the voters go for polls out of which 60 % vote for A. How any votes do B get?

**Question 29**

If the Principal is Rs50000 and 8% is the rate of interest per annum compound annually

a) Find the interest earned in First year

b) What is the principal for 2$^{nd}$ Year

c)What is the interest earned in second year

d) Is First year interest same as second year interest

e) What will be the total interest earned for 2 years if it were simple interest per annum

**Question 30**

An agent of an insurance company gets a commission of 8 % on the basic premium he collects. What will be the commission earned by him if he collects Rs 4800?

**Question 31**

There are 442 boy students in class X in all the section in Saint Xavier school. If 25% of the students are girls, find the total number of students in class X

**Question 32**

You buy a house for Rs 400,0000 and pay a tax of 8%. How much is tax?

**Question 33**

Z% of 100 + 10% of 50 = 100

Find the value of z