**Topic : Percentage & Profit & Loss question Bank**

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1. **What is 25% of 200?**
   1. 25
   * 50
   1. 75
   2. 100

Ans: 25%\*200=(1/4)\*200=50

1. **If 40% of a number is 80, what is the number**?
   1. 100\
   2. 150\
   * 200
   1. 250

Ans: 40%\*a=80 => a=80/0.4=200

1. **75% of a number is 150. What is the number**?
   1. 175
   * 200
   1. 225\
   2. 250

Ans:75%\*a=150 => a=150\*(4/3)=200

1. **What is 15% of 120?**
   1. 12\

b)15\

* + 18\
  1. 20

Ans: 10% of 120=12 and 5% of 120=6

Therefore 15% of 120 is 18

1. **If 30% of a number is 90, then the number is**:\
   1. 200\
   2. 250\
   * 300\
   1. 350

Ans: 30%\*a=90 => a=90\*100/30

a=300

1. **The price of a product increases from ₹200 to ₹250. What is the percentage increase**?\
   1. 20%\
   * 25%\
   1. 30%\
   2. 35%

Ans: (50/200)\*100=25%

1. **A salary increases from ₹40,000 to ₹50,000. What is the percentage increase?\**
   1. 20%\
   * 25%\
   1. 30%\
   2. 35%

Ans: (10000/40000)\*100=25%

1. The population of a town decreased from 10,000 to 8,000. What is the percentage decrease?\
   1. 10%\
   2. 15%\
   * 20%\
   1. 25%

Ans: (2000/10000)\*100=20%

1. **A book's price drops from ₹500 to ₹400. What is the percentage decrease**?\
   1. 10%\
   2. 15%\
   * 20%\
   1. 25%

Ans : (100/500)\*100=20%

1. **If the cost price of an item is ₹600 and the selling price is ₹450, what is the percentage loss?\**
   1. 20%\
   2. 22.5%\
   * 25%\
   1. 30%

Ans:Loss=150;Loss%=(150/600)\*100=25%.

1. **### \*\*Section 3: Percentage Comparison\*\***
2. **Which is greater: 30% of 400 or 40% of 300?\**
   1. 30% of 400\
   2. 40% of 300\
   * Both are equal\
   1. Cannot be determined
3. **A person spends 60% of his income and saves ₹8,000. What is his total income?\**
   1. ₹15,000\
   2. ₹18,000\
   * ₹20,000\
   1. ₹25,000

Ans: Total income=(60%)Total Income+8000=>40%(Tota Income)=8000

Total Income=(8000/40)\*100=Rs.20,000 .

1. **If A is 20% more than B, then B is how much less than A?\**
   1. 20%\
   * 16.67%\
   1. 25%\
   2. 10%

Ans:Let B=100 -> A=120

Therefore (20/120)\*100=16.667%

1. **If the price of sugar is increased by 25%, by how much should the consumption be reduced to maintain the same expense?\**
   * 20%\
   1. 25%\
   2. 30%\
   3. 15%

* Expence =price\*cusumption

Let P1=100 and **C1=100** =>E1=100\*100=E2=125\*c2

**C2=80**=>therefor consumption reduce by 20%.

1. **If A’s income is 40% more than B’s income, then B’s income is what percentage less than A’s?\**
   * 28.57%\
   1. 30%\
   2. 33.33%\
   3. 40%

Let B=100 =>A=140 ans=[(140-100)/140]\*100=28.57%

1. **The price of an item is increased by 20% and then decreased by 10%. What is the net percentage change**?\
   * 8% increase\
   1. 8% decrease\
   2. 10% increase\
   3. 10% decrease

P1=100=>P2=120=>P3=108 [(108-100)/100]\*100=8% increase

1. **A number is increased by 30% and then decreased by 20%. What is the final percentage change?\**
   * 4% increase\
   1. 8% increase\
   2. 10% increase\
   3. 12% increase
2. **If the population of a city increases by 25% and then decreases by 20%, what is the net percentage change?\**
   * 0%\
   1. 5% increase\
   2. 10% decrease\
   3. 5% decrease

P1=100=>P2=125=>P3=100

1. **If a price increases by 40% and then decreases by 30%, the final change is**:\
   1. 2% increase\
   2. 10% increase\
   3. 10% decrease\
   * 2% decrease

P1=100=>P2=140=>P3=98 [(100-98)/100]\*100= 2% decrease

1. **The salary of a person is first increased by 20% and then decreased by 10%. What is the overall percentage change**?
   * 8% increase
   1. 10% increase
   2. 10% decrease
   3. No change

p1=100->p2=120->p3=108 p1 to p3=8%increase

1. **If an article is sold at a profit of 25%, then the selling price is what percentage of the cost price?**
   1. 100%\
   * 125%
   1. 150%\
   2. 175%

Let cp=100 then sp=125 => 125=x%\*100 => x=125%

1. **A shopkeeper allows a discount of 10% on the marked price and still makes a profit of 8%. If the marked price is ₹500, what is the cost price?\**
   1. ₹400\
   * ₹420\
   1. ₹450\
   2. ₹460

Let MP=100=>Sp=90 cp=(90\*100)/108=500/6

If MP=500 => CP=

1. **If the profit is 20% of the cost price, then what is the profit percentage on the selling price?**
   * 16.67%\
   1. 18%\
   2. 20%\
   3. 22%

P= sp-cp =20%\*cp=>sp=(6\*cp/5) %p=[(sp-cp)/sp]\*100=16.67%

1. **A product is marked at ₹1,200 and sold for ₹960. What is the percentage discount given?**
   1. 15%\
   * 20%\
   1. 25%\
   2. 30%

MP=1200 SP=960 %D=[(MP-SP)/MP]/100=20%

1. **If an article is bought for ₹500 and sold for ₹650, what is the percentage profit?**
   1. 20%\
   2. 25%\
   * 30%\
   1. 35%
2. **.If A’s income is 20% more than B’s, then B’s income is what percentage less than A’s?**
   * 16.67%
   1. 18%
   2. 20%
   3. 25%

27**.If the ratio of boys to girls in a school is 3:2, what percentage of the total students are boys?**

* 1. 30%
  2. 40%
  3. 50%
  + 60%

B/G=3/2 =>B=(3/5)\*100=60%

1. **A city’s population increased from 2,00,000 to 2,50,000 in 2 years. What is the percentage increase?**
   1. 20%
   * 25%
   1. 30%
   2. 35%

(50000/200000)\*100=25%

1. **In an election, a candidate gets 65% of the total votes and wins by 3000 votes. How many total votes were cast?**
   1. 5000
   2. 6000
   3. 8000
   4. 9000

Let, total=100 win =65 looser=35 diff=65-35=30 given diff=3000

Total votes cast=10000

1. **The price of an article is reduced by 30%. By what percentage must the new price be increased to restore the original price?**
   1. 30%
   * 42.85%
   1. 50%
   2. 60%

Let p1=100 p2=70 ans=[(100-70)/70]\*100=42.85%

1. **If a number is increased by 50% and then decreased by 50%, what is the net percentage change?**
   1. 0%
   * 25% decrease
   1. 50% decrease
   2. 75% decrease

Let N=100=>150(increase by 50%)=>75(decrease by 50%) therefor ans=25%

1. **If A is 20% taller than B, then B is shorter than A by:**
   * 16.67%
   1. 18%
   2. 20%
   3. 25%

Let B=100 => A=120 ans=(20/120)\*100=16.67%

1. **If 30% of a number is 90, what is 60% of the same number?**
   1. 120
   2. 150
   * 180
   1. 200

30%\*num=90=>num=300 therefore 60%\*num=60%\*300=180

1. **A person spends 75% of his income and saves ₹5000. What is his total income?**
   1. ₹15,000
   2. ₹18,000
   * ₹20,000
   1. ₹25,000

Let income=100 => Spends=75 => save=25

Income=? Save=5000

1. **The price of petrol increases by 20%. By what percentage should consumption be reduced to maintain the same expense?**
   * 16.67%
   1. 18%
   2. 20%
   3. 25%

Let p1=100 and c1=100 p2=120 E1=c1\*p1=E2=c2\*p2

C2=100\*100/120 =250/3 ans=[(c1-c2)/c1]\*100=16.67%

1. **The price of a TV was first increased by 20% and then decreased by 10%. What is the overall percentage change?**
   * 8% increase
   1. 10% increase
   2. 10% decrease
   3. No change

Let p1=100 => p2=120 =>p3=108

1. **A shopkeeper marks an item 25% above the cost price and gives a 20% discount. What is his profit/loss percentage?**
   * 0%
   1. 2% profit
   2. 5% profit
   3. 10% loss

Let cp=100 MP=125 SP=100

1. **If the cost price of an article is ₹500 and it is sold at a loss of 20%, what is the selling price?**
   1. ₹350
   2. ₹375
   * ₹400
   1. ₹450

CP=500 SP=400

1. **If a salary is increased by 10% and then decreased by 10%, what is the final percentage change?**
   1. 0%
   * 1% decrease
   1. 1% increase
   2. 2% decrease

S1=100 =>S2=110 => S3=99

1. **A student needs 40% marks to pass. He gets 200 marks and fails by 20 marks. What are the total marks?**
   1. 500
   * 550
   1. 600
   2. 650

Pass=200+20=40%Total => total=2200/4=550

1. **A man spends 20% of his salary on rent, 30% on food, and 10% on transport. If he saves ₹18,000, what is his salary?**
   1. ₹40,000
   * ₹45,000
   1. ₹50,000
   2. ₹55,000

Let salary=100 save=100-(20+30+10)=40 =>18000 therefor Salary=45000

1. **The cost of an item is first increased by 30% and then decreased by 30%. What is the overall percentage change?**
   1. 0%
   * 9% decrease
   1. 9% increase
   2. 15% decrease

P1=100 => p2=130 => p3=91

**43) The population of a town increases by 10% every year. If the current population is 10,000, what will it be after 3 years?**

* + 13,310

b13,500

c) 14,000

d) 14,200

p1=10000 => p2=11000 => p3=12100 =>p4=13310

**44) If 15% of A is equal to 20% of B, then A:B is:**

a) 3:4

* + 4:3

c) 03:5

d) 5:3

**45) If the cost price of an item is ₹800 and the profit made is 25%, what is the selling price?**

a) ₹900

* + ₹1000

c) ₹1050

d) ₹1100

cp=800 %profit=25% SP=800(125/100)=1000

**46) If the cost price (CP) of an item is ₹200 and the selling price (SP) is ₹250, what is the profit percentage?**

a) 20%

* 25%

c) 30%

d) 40%

CP=200 SP=250 %profit=(50/200)\*100=25%

**47) A man sells an article for ₹720 at a profit of 20%. Find the cost price.**

* ₹600

b) ₹620

c) ₹650

d) ₹700

SP=720 %profit=20% CP= (720\*100)/120=600

**48) A shopkeeper sells an item at a loss of 15%. If the cost price is ₹500, find the selling price.**

a) ₹400

* ₹425

c) ₹450

d) ₹475

CP=500 %loss=15% SP=500\*(85/100)=425

**49) A man purchased a cycle for ₹1500 and sold it at a loss of 10%. What was the selling price?**

a) ₹1200

b) ₹1300

* ₹1350

d) ₹1400

CP=1500 %loss= 10% SP=1500\*(90/100)=1350

**50) A trader marks his goods at 30% above the cost price and allows a discount of 10%. What is his gain percent?**

* 17%

b) 18%

c) 19%

d) 20%

let CP=100 MP=130 SP=117 %gain=(17/100)\*100=17%