Percentage Questions PDF with detailed Solutions

Percentage questions are a common type of questions regularly asked in competitive exams. These questions carry a weightage of 1-2 questions(2-4 marks) in SSC exams and 1-2 questions(1-2 marks) in bank exams. To perform well in competitive exams, concepts of percentage should be on your tips.

Here are some tips for solving Percentage questions: Try converting percentages into fractions, memorise common percentage values, break down complex problems into simpler steps, and practice consistently to sharpen your skills with real-world scenarios.

So, we have attached 10 questions of Percentage for you to practice with. You should aim to solve these questions in less than half a minute for each.

Practice Questions on Percentage

You can also download the Percentage questions and answers pdf. Just click on the **Download PDF** button. So let's start with the very first question.
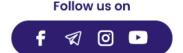
Q:1 The monthly incomes of Ramesh and Aarti are in the ratio 8 : 5, respectively. Find the monthly expenditure of Ramesh if the monthly savings of Aarti is 62.5% of the monthly savings of Ramesh and the monthly expenditure of Ramesh is Rs. 3,150 more than the monthly expenditure of Aarti.

1. Rs. 9100

2. Rs. 8600

3. Rs. 8000

4. Rs. 8400

(**Difficulty:** 3, **Estimated Time:** 20 Seconds) Try using short tricks, fraction values of percentages

Q:2 There are two villages 'A' and 'B'. The number of males in village 'B' is 50% more than that in the village 'A' and the number of females in village 'B' is 432 more than that in the village 'A'. If the number of males in village 'B is increased by 20% and number of females in village 'A' is increased by 40%, then the total population of village 'B' and 'A' will become 2832 and 2144, respectively. Find the original number of males in village 'B'.

1. 1300

2. 900

3. 1000

4. 1200

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(**Difficulty:** 3, **Estimated Time:** 20 Seconds) This was a simple one, don't get stuck in unnecessary calculations!

Q:3 The total number of males and females in a city is 30,000. If the number of males increases by 6% and females by 4% then total number of male and female becomes 31500. Find the number of males in the town in beginning.

1. 15000

2. 14000

3. 16000

4. 20000

(**Difficulty:** 3, **Estimated Time:** 20 Seconds) This is a common type of question asked..

Q:4 The population of Surat increases at a uniform rate of 26% per year, but due to people coming from different states, there is a further increase in it by 4%, which is to be calculated it after the 26% increase. If the population of Surat is 50,000 in 2020 then, find the total population in 2021.

1. 64500

2. 65000

3. 56000

4. 60000

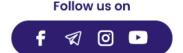(**Difficulty:** 3, **Estimated Time:** 20 Seconds) It is a bit calculative one...

Q:5 Raj decided to increase the speed of his car by 25% and also would like to increase the time of travel by 40%. What is the percentage increase in the distance he covers?

1. 50

2. 65

3. 75

4. 80

(**Difficulty:** 3, **Estimated Time:** 20 Seconds) We're halfway through. Have you got all your questions correct so far?

Q:6 75% of a is equal to 112.5% of b, also, 25% of the successor of a is equal to 50% of the predecessor of b. What is the value of a?

1. 8

2. 9

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3. 10

4. 12

(**Difficulty:** 3, **Estimated Time:** 20 Seconds) You should not spend more than 20 seconds in attempting this question...

Q:7 In an election two candidates participated, 10% of voters did not vote, 6800 votes were declared invalid and the winner gets 55% of the valid votes and won by 4000 votes. Find the number of voters in the voting list.

1. 60000

2. 48000

3. 36000

4. 52000

(**Difficulty:** 4, **Estimated Time:** 25 Seconds) This was a bit hard. Did you get it right?

Q:8 The income of Rohit is 37.5% more than the expenditure of Mohit. If income of Mohit is 50% more than the expenditure of Rohit. If the savings of Mohit is Rs. 3,500 more than that of Rohit's and the ratio between expenditure and savings of Rohit is 9 : 2, respectively, then find the income of Mohit.

1. Rs. 13,500

2. Rs. 11,000

3. Rs. 12,500

4. Rs. 10,000

(**Difficulty:** 2, **Estimated Time:** 15 Seconds) This was a piece of cake....
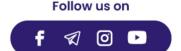
Q:9 The ratio of gold and silver in an ornament is 9 : 7. What is the percentage of gold in the jewelry?

1. 48.79%

2. 51.80%

3. 56.25%

4. 40.9%

(**Difficulty:** 3, **Estimated Time:** 20 Seconds) You might have wrapped it up in 15 seconds...

Q:10 Vedant's salary decreased by 60% and then increased by 60%. Find the overall percentage reduction of Vedant's salary.

1. 64%

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2. 36%

3. 24%

4. 40%

(**Difficulty:** 2, **Estimated Time:** 15 Seconds) Did you guess them all correctly?

Answer Key

Let's check out your score in this test.

1. (4)	2. (4)	3. (1)	4. (2)	5. (3)
6. (2)	7. (4)	8. (1)	9. (3)	10. (2)

Comment below your score, considering each question has 1 mark only. If you scored 8 to 10, congratulations! You are one step closer to selection. If you have scored 5 to 8 marks, then you are doing well, keep it up. If you have scored less than 5 marks then you need to work a little harder on this subject. But don't worry, we are here to help you master the subject.

Let's check the answers and solutions and try to find out what went wrong.

Answers and Solutions

Q:1 The correct answer is **option 4** i.e. **Rs. 8400.**

Let the monthly savings of Ramesh be Rs. 'x'

So, the monthly savings of Aarti = Rs. '0.625x'

So, the ratio of the monthly savings of Ramesh to that of Aarti

$\Rightarrow$ x : 0.625x = 8 : 5

As the monthly incomes and savings both are in the ratio 8 : 5, then the monthly expenditures are also in the same ratio.

Let the monthly expenditures of Ramesh and Aarti be Rs. '8y' and Rs. '5y' respectively

According to the question,

$\Rightarrow$ 8y $-$ 5y = 3150

$\Rightarrow$ 3y = 3150

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⇒ y = 1050

So, the monthly expenditure of Ramesh = (8 × 1050) = Rs. 8400

Q:2 The correct answer is **option 4** i.e. **1200**.

Let the number of males in the village 'A' be 'x'

So, the number of males in the village 'B' = 1.50 × x = 1.5x

Let the number of females in the village 'A' be 'y'

So, the number of females in village 'B' = y + 432

So, x + 1.4y = 2144............(1)

And, 1.5x × 1.2 + y + 432 = 2832

Or, 1.8x + y = 2400..................(2)

Solving equation (1) and (2), we get

x = 800 and y = 960

So, the number of males in the village 'B' = 1.50 × 800 = 1200

Q:3 The correct answer is **option 1** i.e. **15000**

Given :

Total number of males and females in a city is 30,000.

If the number of males increases by 6% and females by 4%, total number of male and female becomes 31500

Calculations :

Let the number of males be x

Number of females be (15000 - x)

As number of males increase by 6% and number of females increases by 4%

⇒ x × 6% + (30000 - x) × 4% = 1500

⇒ (6x/100) + (30000 - x) × (4/100) = 1500

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$\Rightarrow$ 6x + 120000 - 4x = 150000

$\Rightarrow$ 2x = 30000

$\Rightarrow$ x = 15000

Number of males in the beginning is 15000.

Q:4 The correct answer is **Option 2** i.e. **65000.**

In 2020, Population of Surat = 50000

After 1 year in 2021

Increased by successive of (26% + 4%) = 30%

Total increased population in 1 year = 30%

Increased in 1 year = (50000/100) × 30 = 15000

Total population of surat in 2021 = (50000 + 15000) = 65000

Q:5 The correct answer is **Option 3** i.e. **75.**

Let the original speed and time of travel be 'x' and 'y'

Original distance planned = xy [∵ Distance = Speed × Time]

Increased speed = (100 + 25)/100 × x = 1.25x

Increased time of travel = (100 + 40)/100 × x = 1.4y

Increased distance = 1.25x × 1.4y = 1.75xy

Hence, % increase in distance covered = (1.75xy – xy)/xy × 100 = 75%

Q:6 The correct answer is **Option 2** i.e. **9.**

75% of a = 112.5% of b

$\Rightarrow$ 75/100 × a = 112.5/100 × b

$\Rightarrow$ 3a/4 = 9b/8

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$\Rightarrow a = 3b/2$

25% of successor of a = 50% of predecessor of b

$\Rightarrow 25/100 \times (a + 1) = 50/100 \times (b - 1)$

$\Rightarrow (1/4) \times (3b/2 + 1) = (1/2) \times (b - 1)$

$\Rightarrow 3b/8 + 1/4 = b/2 - 1/2$

$\Rightarrow 3/4 = b/8$

$\Rightarrow b = 6$

$\Rightarrow a = 3 \times 6/2 = 9$

Q:7 The correct answer is **Option 4** i.e. **52000.**

Let the number of total voters in the voting list be x

The winner gets 55% of the valid votes

So, the loser gets 45% of the valid votes

Difference = 55 - 45 = 10%

According to question

(90x/100 - 6800)10/100 = 4000

$\Rightarrow 9x/10 - 6800 = 40000$

$\Rightarrow 9x/10 = 46800$

$\Rightarrow x = 52000$

$\therefore$ Total number of voters = 52000

Q:8 The correct answer is **option 1** i.e. **Rs. 13,500.**

Let the expenditure of Mohit be Rs. '8x'

So, income of Rohit = 8x × 11/8 = Rs. '11x'

Let the expenditure of Rohit be Rs. '2y'

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So, income of Mohit = 2y × 1.50 = Rs. '3y'

So, savings of Rohit = 2y × 2/9 = Rs. 4y/9

According to the question;

⇒ 11x − 2y = 4y/9

⇒ 11x = 22y/9

⇒ x = 2y/9

Since the savings of Mohit is Rs. 3,500 more than that of Rohit.

⇒ 11x − 2y + 3500 = 3y − 8x

⇒ 19x + 3500 = 5y

⇒ 19 × 2y/9 + 3500 = 5y

⇒ 3500 = 7y/9

⇒ y = 4500

So, income of Mohit = 3 × 4500 = Rs. 13,500

Q:9 The correct answer is **Option 3** i.e. **56.25%**

The ratio of gold and silver = 9 : 7

Percentage = (Price Received/Maximum Value) × 100

Percentage of gold in jewelery = [9/(9 + 7)] × 100 = (9/16) × 100 = 56.25%

Q:10 The correct answer is **option 2** i.e. **36%.**

Let the initial salary be Rs 1000

then it decreased by 60%, so salary now is Rs 400

Now, there is an increase in salary by 60%, so salary now is 60% of 400 + 400 = Rs 640

Thus, overall percentage reduction = 360/1000 = 36%

So, this is it for today. We will meet again with another new topic. Till then, you can practice the questions again by downloading the PDF of Percentage.