

WALT how to calculate the percentage increase and decrease as well as profit and loss.

Success Criteria

- I can explain what a percentage is and how to calculate it.
- I can identify different ways to increase and decrease percentages.
- I can apply my knowledge to real-world problems.

Formula :- (New value - Old value) / Old value * 100

[Video by Dr Frost](#)

Percentage increase

1. The price of a gallon of milk increased from \$3.50 to \$4.00. What is the percentage increase in price?
2. The population of a city increased from 100,000 to 120,000 in 10 years. What is the percentage increase in population?
3. A student's test score increased from 70% to 80%. What is the percentage increase in their score?
4. The sales of a company increased by 20% from last year. What is the new sales amount if last year's sales were \$100 million?
5. The interest rate on a savings account increased from 1% to 2%. What is the percentage increase in the interest rate?
6. The number of students enrolled in a college increased from 10,000 to 11,000. What is the percentage increase in enrollment?
7. The price of a house increased from \$300,000 to \$360,000. What is the percentage increase in price?
8. The value of a stock increased from \$50 per share to \$60 per share. What is the percentage increase in value?
9. The number of visitors to a website increased from 1 million per month to 1.2 million per month. What is the percentage increase in visitors?
10. The number of employees at a company increased from 500 to 600. What is the percentage increase in employees?

Percentage decrease

1. The price of a gallon of gasoline decreased from \$4.00 to \$3.50. What is the percentage decrease in price?
2. The population of a city decreased from 100,000 to 90,000 in 10 years. What is the percentage decrease in population?
3. A student's test score decreased from 80% to 70%. What is the percentage decrease in their score?
4. The sales of a company decreased by 10% from last year. What is the new sales amount if last year's sales were \$100 million?
5. The interest rate on a credit card decreased from 20% to 15%. What is the percentage decrease in the interest rate?
6. The number of students enrolled in a class decreased from 20 to 15. What is the percentage decrease in enrollment?
7. The price of a car decreased from \$20,000 to \$18,000. What is the percentage decrease in price?
8. The value of a home decreased from \$400,000 to \$360,000. What is the percentage decrease in value?
9. The number of visitors to a museum decreased from 1 million per year to 900,000 per year. What is the percentage decrease in visitors?
10. The number of employees at a company decreased from 1,000 to 900. What is the percentage decrease in employees?
- 11.

Percentage increase

1. 14.28%
2. 20%
3. 14.29%
4. \$120 million
5. 100%
6. 10%
7. 20%
8. 20%
9. 20%
10. 20%

Percentage decrease

1. 12.5%
2. 10%
3. 12.5%
4. \$90 million
5. 25%
6. 25%
7. 10%
8. 10%
9. 10%
10. 10%
- 11.