WALT learn how to increase and decrease percentages.

## 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.
(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. 
