

Learning Targets

Percentage Increase and Decrease

Lesson 1: Half as Much Again

- I can use the distributive property to rewrite an expression like $x + \frac{1}{2}x$ as $(1 + \frac{1}{2})x$.
- I understand that “half as much again” and “multiply by $\frac{3}{2}$ ” mean the same thing.

Lesson 2: Say It with Decimals

- I can use the distributive property to rewrite an equation like $x + 0.5x = 1.5x$.
- I can write fractions as decimals.
- I understand that “half as much again” and “multiply by 1.5” mean the same thing.

Lesson 3: Increasing and Decreasing

- I can draw a tape diagram that represents a percent increase or decrease.
- When I know a starting amount and the percent increase or decrease, I can find the new amount.

Lesson 4: One Hundred Percent

- I can use a double number line diagram to help me solve percent increase and decrease problems.
- I understand that if I know how much a quantity has grown, then the original amount represents 100%.
- When I know the new amount and the percentage of increase or decrease, I can find the original amount.

Lesson 5: Percent Increase and Decrease with Equations

- I can solve percent increase and decrease problems by writing an equation to represent the situation and solving it.

Lesson 6: More and Less than 1%

- I can find percentages of quantities like 12.5% and 0.4%.
- I understand that to find 0.1% of an amount I have to multiply by 0.001.

Lesson 7: Tax and Tip

- I understand and can solve problems about sales tax and tip.

Lesson 8: Percentage Situations

- I can find the percentage increase or decrease when I know the original amount and the new amount.
- I understand and can solve problems about commission, interest, markups, and discounts.

Lesson 9: Measurement Error

- I can represent measurement error as a percentage of the correct measurement.
- I understand that all measurements include some error.

Lesson 10: Percent Error

- I can solve problems that involve percent error.

Lesson 11: Error Intervals

- I can find a range of possible values for a quantity if I know the maximum percent error and the correct value.

Lesson 12: Posing Percentage Problems

- I can write and solve problems about real-world situations that involve percent increase and decrease.