

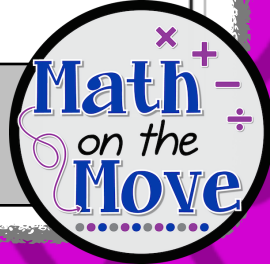
Percent Change and Percent Error

Calculating Percent Change

Name: _____
Date: _____

<p>Learning Target</p> <hr/> <p>Percent Change - _____</p> <hr/> <p>Skills Review -</p> $\frac{3}{8}$ <p>Ashley earned \$20 babysitting in January. In February she earned \$32. What is the percent change in her earnings?</p> <p>Step 1: Find the difference</p> $\square - \square = \square$ <p>Step 2: Set up the following ratio</p> $\frac{\text{difference}}{\text{starting amount}} = \frac{\square}{\square}$ <p>Step 3: Change to a percent</p> $\frac{\square}{\square} = \square$ <p>Is it a percent increase or decrease? Explain.</p> <p>_____</p>	<p>Learning Target: I can use percents to calculate percent change.</p> <p style="text-align: center;">Vocabulary</p> <p>Percent Change - _____</p> <hr/> <p>Skills Review - changing fractions to percents</p> $\frac{3}{8} \qquad \frac{12}{25} \qquad \frac{11}{200}$ <p>Ashley earned \$20 babysitting in January. In February she earned \$32. What is the percent change in her earnings?</p> <p>Step 1: Find the difference</p> $\square - \square = \square$ <p>Step 2: Set up the following ratio</p> $\frac{\text{difference}}{\text{starting amount}} = \frac{\square}{\square}$ <p>Step 3: Change to a percent</p> $\frac{\square}{\square} = \square$ <p>Is it a percent increase or decrease? Explain.</p> <p>_____</p>	<p>_____ the nearest tenth of a percent.</p> <p>_____ at cost \$65. She recently bought a new phone that _____ percent increase in the prices of the phones?</p> <hr/> <p>_____ r at a garage sale for \$150. He fixed it up and sold it _____ percent increase?</p> <hr/> <p>_____ th babysitting. This month she earned \$35. What is the _____ percent change?</p> <hr/> <p>_____ uld score 16 points during the basketball game. He only _____ as his percent error?</p> <hr/> <p>_____ re 25 students in her math class, but there were _____ at is her percent error?</p> <hr/> <p>_____ ould take him 90 minutes to mow the lawn. It only took _____ his percent error?</p>
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Notes + Worksheets!



Cut along the dotted lines and glue into your notebook.

Learning Target: I can use percents to calculate percent change.

Vocabulary

Percent Change - _____

Skills Review - changing fractions to percents

$$\frac{3}{8}$$

$$\frac{12}{25}$$

$$\frac{11}{200}$$

Ashley earned \$20 babysitting in January. In February she earned \$32. What is the percent change in her earnings?

Step 1: Find the difference

$$\boxed{} - \boxed{} = \boxed{}$$

Step 2: Set up the following ratio

$$\frac{\text{difference}}{\text{starting amount}} = \frac{\boxed{}}{\boxed{}}$$

Step 3: Change to a percent

$$\frac{\boxed{}}{\boxed{}} = \boxed{}$$

Is it a percent increase or decrease? Explain.

Cut along the dotted lines and glue into your notebook.

Learning Target: I can use percents to calculate percent error.

Vocabulary

Percent Error - _____

The predicted temperature today was a high of 55°F. The actual high temperature was 47°F. Calculate the percent error.

Step 1: Find the difference

$$\boxed{} - \boxed{} = \boxed{}$$

Step 2: Set up the following ratio

$$\frac{\text{difference}}{\text{actual value}} = \frac{\boxed{}}{\boxed{}}$$

Step 3: Change to a percent

$$\frac{\boxed{}}{\boxed{}} = \boxed{}$$

Try It Out!

Haley thought 12 friends were coming to her party, but 15 friends showed up. Calculate the percent error.

Calculating Percent Change and Percent Error

Name: _____

Date: _____

Show your work. Round to the nearest tenth of a percent.

1 Alexis had a cell phone that cost \$65. She recently bought a new phone that cost \$79. What was the percent increase in the prices of the phones?

2 Kevin bought a used guitar at a garage sale for \$150. He fixed it up and sold it for \$200. What was the percent increase?

3 Elle earned \$45 last month babysitting. This month she earned \$35. What is the percent decrease?

4 Ray predicted that he would score 16 points during the basketball game. He only scored 12 points. What was his percent error?

5 Ainsley thought there were 25 students in her math class, but there were actually 27 students. What is her percent error?

6 Trent told his friends it would take him 90 minutes to mow the lawn. It only took him 75 minutes. What is his percent error?

Cut along the dotted lines and glue into your notebook.

Learning Target: I can use percents to calculate percent change.

Vocabulary

Percent Change - the extent to which a value increases or decreases. Also known as percent increase or percent decrease.

Skills Review - changing fractions to percents

$$\frac{3}{8} \quad 37.5\% \quad \frac{12}{25} \quad 48\% \quad \frac{11}{200} \quad 5.5\%$$

Jenny earned \$20 babysitting in January. In February she earned \$32. What is the percent change in her earnings?

Step 1: Find the difference

$$\boxed{32} - \boxed{20} = \boxed{12}$$

Step 2: Set up the following ratio

$$\frac{\text{difference}}{\text{starting amount}} = \frac{\boxed{12}}{\boxed{20}}$$

Step 3: Change to a percent

$$\frac{\boxed{12}}{\boxed{20}} = \boxed{60\%}$$

Is it a percent increase or decrease? Explain.

Increase. She made more money in February than January. Her earnings increased over time.

Note: It is helpful to have students highlight this, since it's so easy to confuse it with percent error

Cut along the dotted lines and glue into your notebook.

Learning Target: I can use percents to calculate percent error.

Vocabulary

Percent Error - describes how far away from the expected value your result is

The predicted temperature today was a high of 55°F. The actual high temperature was 47°F. Calculate the percent error.

Step 1: Find the difference

$$\boxed{55} - \boxed{47} = \boxed{8}$$

Step 2: Set up the following ratio

$$\frac{\text{difference}}{\text{actual value}} = \frac{\boxed{8}}{\boxed{47}}$$

Step 3: Change to a percent

$$\frac{\boxed{8}}{\boxed{47}} = \boxed{17\%}$$

Note: It is helpful to have students highlight this, since it's so easy to confuse it with percent change

Try It Out!

Haley thought 12 friends were coming to her party, but 15 friends showed up. Calculate the percent error.

$$\frac{\underline{3}}{15} = 20\%$$

Calculating Percent Change and Percent Error

Name: KEY

Date: _____

Show your work. Round to the nearest tenth of a percent.

1 Alexis had a cell phone that cost \$65. She recently bought a new phone that cost \$79. What was the percent increase in the prices of the phones?

21.5%

2 Teney bought a used guitar at a garage sale for \$150. He fixed it up and sold it for \$200. What was the percent increase?

33.3%

3 Elle earned \$45 last month babysitting. This month she earned \$35. What is the percent decrease?

22.2%

4 Ray predicted that he would score 16 points during the basketball game. He only scored 12 points. What was his percent error?

33.3%

5 Aruna thought there were 25 students in her math class, but there were actually 27 students. What is her percent error?

7.4%

6 Trent told his friends it would take him 90 minutes to mow the lawn. It only took him 75 minutes. What is his percent error?

20%

Need more Resources?

Click on the links below!

Simple Interest

Learning Target: I can use percents to calculate simple interest.

Vocabulary

Interest - _____
Interest Rate - _____
Principal - _____

Simple Interest Formula

$$I = prt$$


Calculate the Interest

Principal: \$2000 Interest Rate: 6% Time: 4 years	Principal: \$400 Interest Rate: 3% Time: 3 months
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Real World Problem

Isiah borrowed \$1500 for a used car. He plans to pay back the loan in 3 years. His interest rate is 8%. How much will he pay back in interest?

What will be the total amount he'll pay back?

Notes + Worksheets! 

Sales Tax, Tips and Commission

Learning Target: I can use percents to calculate sales tax, tips, and commission.


Vocabulary

Sales Tax - _____
Commission - _____

Finding the Sales Tax **Finding the Total Price**

Tips

Commission

Notes + Worksheets! 

Percents Discount and Sale Price


Learning Target: I can use percents to calculate discount and sale price.

Vocabulary

Discount Rate - _____
Discount - _____
Sale Price - _____

Practice Together

Independent Practice

Notes + Worksheets! 

Percent Applications Scavenger Hunt!!

to show your work. Write your answer in the box.

Name: _____
Date: _____

If you found \$8.50

If you found \$25

Multiple Ways to Use!! 

Thank You!!

I appreciate your purchase! If you have any questions or comments, please email me at mathonthemovel@gmail.com.

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