

Finding Percentages with Cindy Abbott's Budget

Developed by: Erin Montgomery, 2015 Iditarod Teacher on the Trail™

Discipline: Math

Topic: Finding percentages

Grade Level: 7th grade

Resources / References / Materials Teacher Needs:

1. Musher budget (Cindy Abbott's budget is attached)
2. Finding Percentages Worksheet
3. Cindy Abbott's supply list
4. Cindy Abbott's actual budget

Lesson Summary: Students will be finding percentages using a realistic budget.

Standard's Addressed: Common Core Standards

1. CCSS.Math.Content.7.RP.A.3: Use proportional relationships to solve multi-step ratio and percent problems.
Examples: simple interest, tax, markups and markdowns, gratuities and commissions, fees, percent increase and decrease, percent error.

Learning objectives:

1. Students will be able to translate real-world problems into proportions involving percent.
2. Students will be able to convert dollar amount to percentages using a circle graph.

Procedural Activities:

1. Introduction: Tell students that a musher has a number of supplies to purchase in order to run the Iditarod race. Cindy Abbott shared with me her budget for this season. Approximately, how much money do you think Cindy will spend this racing season?
2. Have students make guesses.
3. Give approximate number - \$35,176
4. Ask students: What do you think she includes in this budget?
5. Have students make a list of what they think the budget includes. Example: sled, dog booties, gloves, etc.
6. Give students answer (see Cindy Abbott supply list).
7. Have students organize her list into 5 categories. Example: travel expenses.
8. Give students a budget of \$36,000. Students will need to begin the worksheet (see attached).
9. Share with students Cindy's exact numbers (see Cindy Abbott's actual budget).
10. Finish worksheet.
11. Discuss results together.

Materials Students Need:

1. Finding Percentages Worksheet
2. Cindy Abbott's supply list
3. Cindy Abbott's actual budget

Technology Utilized to Enhance Learning:

1. Google Drive to create circle graph.

Other Information: Another option is to use Microsoft Word to create graphs.

Modifications for special learners/ Enrichment Opportunities:

1. Modification: Have supplies split into categories ahead of time.
2. Enrichment: Students can make a spreadsheet showing their budget and categories. Possibly have students compare a fictional income to amount they are spending. How much per month do you have to save, etc.