

Event Planning

Grab and Go

GED[®] Mathematics Reasoning

Writing and Solving Inequalities
Extension Activity: Percent Applications

Ronald Cruz



Event Planning

Lesson Activity

This Grab and Go Activity follows a real-world problem solving approach and is designed to be conducted with your students. You may use this activity as a review for small groups of students or use this activity as part of your lesson with your whole class. Preview the Grab and Go Activity in its entirety before showing it to your students so that you know when to pause the video and allow your students to work the problem.

The first part of the video will introduce the real-world problem at hand as a class challenge. After that, students will be given time to set-up and solve their equation based on the information given in the problem. The last part of the video will show the step-by-step solution to real-world (challenge) problem.

Please note that there are multiple ways to solve a particular word problem. This grab and go will only show one method of solution. It is best practice for teachers to show alternative approaches or solutions to the problem presented in this Grab and Go Activity.

Real-World (Challenge) Problem:

Given a budget of \$3000.00, compute the number of guests you can invite if the set menu costs \$25.00 per person and the cost to rent the space is \$250.00.

Solution:

$$\begin{array}{r} 25x + 250 \leq 3000 \\ \downarrow \quad -250 \quad -250 \\ \hline \cancel{25}x \qquad \leq \quad \cancel{250} + 3000 \\ \cancel{25} \qquad \qquad \qquad 25 \\ \qquad \qquad \qquad \qquad \qquad x \leq 110 \end{array}$$

Enrichment:

To extend this activity, students may be asked to re-compute for the number of guests if the event location requires the event planner to pay local sales tax. Based on the set menu amount of \$25.00 per guest, how much would be the suggested gratuity for their respective servers?

Additional Problems:

1. Given a budget of \$3000.00, how many guests can you invite to a restaurant reception if the set menu costs \$40.00 per person and the cost to rent the space is \$225.00?
2. How much would it cost to invite 21 guests to a birthday dinner, if the set menu costs \$32.95? Would it save more money to invite 30 guests, selecting the cheaper set-menu option priced at \$27.21? Explain your reasoning.
3. Your company assigns you to plan a conference at a local resort and gave you a budget of \$31,000.00. If the resort fee is \$50.00 per person, meals \$30.00 per person and the cost to reserve the conference room is \$1,200.00, what is the maximum number of attendees you can invite?