

Name: Heidi Nunley

Grade Level/Subject: Algebra 1

Topic: Linear Functions, Equations & Inequalities

Objectives (P.A.S.S.): 2.4e - Develop the equation of a line and graph linear relationships given the following: a set of data points

Introduction: The teacher will review the linear equation $y=mx + b$ and each of it's components. The teacher will then ask the students if they can come up with a real-world situation where this equation might be used. If time permits, discuss the situations in class.

Instructional process: Bryan and his band want to record and sell CDs. There will be an initial set-up fee of \$250, and each CD will cost \$5.50 to burn. The recording studio requires bands to make a minimum purchase of \$850, which includes the set-up fee and cost of burning CDs.

1. Write a function relating the total cost and the number of CDs burned.
2. Write and solve an inequality to determine the minimum number of CDs the band can burn to meet the minimum purchase of \$850.

Closure: 3. If the initial set-up fee is reduced by 50%, will the total cost be less than, equal to or more than 50% of the original total cost? Justify your answer.

Assessment: The students answers to questions 1, 2, and 3 above will be graded by the teacher.

Modifications/Accommodations: The teacher will provide and ELL student with a Spanish/English math reference book to aide in the communication of the concepts. A gifted student will be allowed to work at a faster pace.

Reflection: The students really enjoyed this activity and were able to see how this particular equation was used in real-world situation. Next time I will come up with more questions for this particular problem to give the students more practice.