Phone Card

5600

Introduction

In this activity, students use a table to compare two phone card plans.

Grades 6-8

NCTM Algebra Standards

- Understand patterns, relations, and functions
- Relate and compare different forms of representation for a relationship

Files/Materials Needed

None

1

a. Provide students with the following information.
Connection's offers two plans for their prepaid phone cards.
Plan A charges a 75¢ connection fee each time the card is used and then charges a low rate of 2¢/minute.
Plan B has no fee but charges 5¢/minute.

b. Instruct your students to use the costs given above to make a table showing the total amount due after each minute during the first 10 minutes for both plans. A suggested table format is shown.

Minutes	Plan A	Plan B
1		
2		
.		
.		
10		

c. Enter the values from your table into lists in your calculator. Enter minutes in L1 and amount due in L2.
d. Use **Screen Capture** to monitor their progress.

2

a. Launch TI-Navigator™ on the computer and start the session.
b. Have each student log into NavNet on their calculator.

3

a. Use **Quick Poll** (with *Multiple Choice A thru B*) to ask:
- *Which plan, A or B, would cost you less for a ten minute call?*

b. Stop the poll and discuss the results. The answer is B.

4

a. Use **Quick Poll** (with *Open Response*) to ask:
- *When will the charge for Plan A be the same as Plan B?*

b. Stop the poll and discuss the results. The answer is 25 minutes.

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5

a. Use **Quick Poll** (with *Multiple Choice A thru D*) to ask:
  - *When is it better to use Plan A with the connection fee?*

  A) during the first 5 minutes
  B) after 25 minutes
  C) between 6 and 10 minutes
  D) between 11 and 25 minutes

b. Stop the poll and discuss the results. The answer is B.

6

a. Have students log out of NavNet.
b. Instruct your students to use their table and calculator to answer the following question.
  - *With a $20 phone card, how many 10- minute calls can be made with each plan?*
c. Instruct your students to show their answers to the question on the home screen of their calculator. Use **Screen Capture** to display their answers. Discuss the results.