

Hit the Target

Purpose

Students will participate in an activity to use mental arithmetic to add or subtract simple decimals.

Materials

For the teacher: overhead projector, overhead markers, overhead calculator, card stock for set of cards made from Black Line Master (BLM) *Decimals*

For each group of 4 students: card stock for set of cards made from BLM *Decimals*, calculator

Activity

A. Pre-Activity Preparation

Make copies of the BLM *Decimals* on card stock paper, and cut the squares into cards.

B. Introduction

1. Tell students they will be practicing adding and subtracting decimals without using paper or pencils.
2. Explain to students that they will be trying to hit the target of 1 by listening as you read out a list of decimals. Explain to students that they should add the numbers mentally, stopping when they think the total is close to 1. Tell students that the total cannot exceed 1, and have students write their total.

C. Teacher-Led Activity

1. Model the playing of the target activity as follows:
 - Draw a card from the stack and say the decimal.
 - Enter the decimal into the overhead calculator. (With each addition, write the total on the overhead, but keep the overhead turned off.)
 - Tell students that, when they think they have come as close to 1 as possible without going over, they should write their total on a piece of paper, turn the paper over quietly, and not add on any more of the decimals that you read out.
 - When all students have stopped, turn on the overhead and ask: "Who had a correct decimal that was closest to 1 without going over?"

(continued)

EXTENDING THE ACTIVITY



Tell students that they have \$25.00 to spend. Have them look through a catalog and find as many items as possible to purchase without going over the amount of money they started with (they should do this activity mentally).

MEETING INDIVIDUAL NEEDS



For students who need additional practice in building better estimation skills, begin the game with tenths cards. Then, add hundredths and thousandths cards gradually.

Standards Links
5.2.5, 5.2.6

Activity (continued)

2. Repeat this target activity several times.
3. To practice using mental arithmetic to subtract simple decimals, start with 1 and make the target number 0.


D. Group Activity


1. Divide the class into groups of four students.
2. Have one student in each group act as leader. Direct this student to draw the cards, read the decimals, enter them into the calculator, and record the totals.
3. Tell students that the other three in the group will play the target game as they did as a class. Each time a student is the closest to the target, he or she earns one point.
4. Have students change roles at the end of each round and alternate adding and subtracting.

Questions for Review

Basic Concepts and Processes

During the Group Activity, ask students the following questions:

 Tell me aloud how you are [*insert adding or subtracting*] your decimals.

 Explain your method to me.

Decimals

0.006	0.25	0.09	0.008	0.036
0.008	0.075	0.005	0.085	0.12
0.043	0.029	0.32	0.019	0.082
0.006	0.046	0.46	0.075	0.001
0.04	0.063	0.053	0.07	0.073
0.19	0.003	0.058	0.048	0.8

Decimals

Teacher Directions

Copy the BLM *Decimals* on card stock, and cut it up to make cards for the activity. Distribute one set of cards to each group of four students and keep one set for yourself.

Answer Key

Not applicable.