No More Pennies

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1 Goals

The goals of this activity are:

1. To give students practice with important problem solving skills, especially experimenting by trying simple examples and making guesses.

2. To give students an example of discrete linear combinations, and show how they differ from the "continuous" linear combinations discussed in the linear algebra portion of the class.

2 Materials

For this activity you will need:

1. Handouts

3 Instructions

This activity will take approximately 30 minutes.

1. Form groups of 3 to 4 students, give students handouts, and explain the goals of the activity. Emphasize that there is no expectation that they solve all the problems on the handouts. Explain the first question.

2. As students work on the problems, visit each group to answer any questions they may have.

3. At the end, students can share their answers with the entire class.

4 Tips

1. Explain what the question means carefully, especially whether you are allowed to receive change or not.