**Task #1:**

An Olympic-size swimming pool measures 25 meters by 50 meters. The Harrison City Recreation

Department is planning to construct a new pool that will be bordered with a walkway of a uniform

width *w.* Find the possible widths of the walkway if the total area of the walkway is to be greater than

76 square meters, but no more than 400 square meters.

**Task #2:**

1. Eric and his little sister Amber enjoy playing on the seesaw at the playground. Amber weighs

65 pounds. Eric and Amber balance perfectly when Amber sits about 4 feet from the center

and Eric sits about 2 ½ feet from the center. About how much does Eric weigh?

2. Their little cousin Aleah joins them and sits with Amber. Can Eric balance the seesaw

with both Amber and Aleah on one side if Aleah weighs about the same as Amber? If so,

where should he sit? If not, why not?

**Task #3:**

This year, Zachary has been babysitting his young cousins after school for $70 a month. His uncle also

gave him an extra bonus of $100 for his excellent work. Since school started, Zachary has earned more

than $500. How many months ago did school start? Write an inequality that represents this situation.

Solve it showing all your work.

**Task #4:**

You and a group of friends are planning to order two large pizzas and some soft drinks. Each pizza costs

$12.00. Each extra topping costs $0.50, and each soft drink costs $1.00. You have a total of $40.00

to spend.

Represent this situation as a feasible region on a graph, and indicate the corner points of the region and

its boundaries.