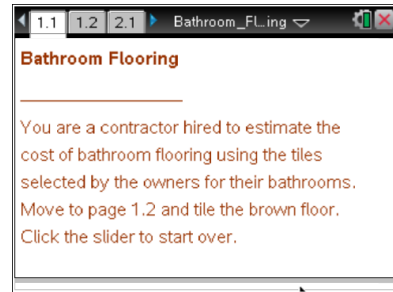# Bathroom Flooring

Student Activity

Name _____

Class _____

Open the TI-Nspire document *Bathroom_Flooring.tns.*

In this activity, you will tile the floors of three bathrooms with different types of provided ceramic tiles and will determine the cost of the floor based on the unit price of each tile.

Read the instructions on page 1.1, and move to page 1.2.

Press ctrl ▶ and ctrl ◀ to navigate through the lesson.

1. This guest bathroom has three permanent fixtures: bathtub, toilet, and sink. Your task is to tile the bathroom around these fixtures with the given square tiles. Grab and drag the black point on each tile to move it into the bathroom area. Grab and drag the white point to rotate the tile. Click the slider to start over.

    a. After you complete the tiling, record the number of different tile pieces you used and the fraction representation of each piece.

Tile piece	Fraction representation of the piece	Number of pieces used to tile the floor
	1	

    b. Calculate the number of tiles you need for this bathroom floor. Show the process you used to do the calculations.

    c. These tiles cost $35.95 per tile. What is the cost of tiling the whole floor?

Move to page 2.1.
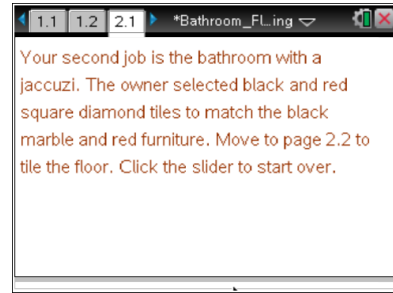
Read the instructions on page 2.1, and move to page 2.2.

> 1.1 1.2 2.1 ▶ *Bathroom_FL.ing ▽
>
> Your second job is the bathroom with a jaccuzi. The owner selected black and red square diamond tiles to match the black marble and red furniture. Move to page 2.2 to tile the floor. Click the slider to start over.

2. This deluxe bathroom has four permanent fixtures: bathtub with Jacuzzi, shower stall, toilet, and sink. Your task is to tile the bathroom around these fixtures with the given square diamond-patterned tiles. Grab and drag the black point on each piece to move it into the bathroom area. Grab and drag the white point on each piece to rotate it. Click the slider to start over.

   a. After you complete the tiling, record the number of different tile pieces you used and the fraction representation of each piece.

Tile piece	Fraction representation of the piece	Number of pieces used to tile the floor
	1	

   b. Calculate the number of tiles you need for this bathroom floor. Show the process you used to complete the calculations.

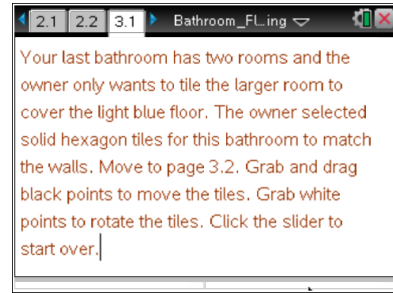   c. These tiles cost $40.50 per tile. What is the cost of tiling the whole floor?

Move to page 3.1.

Read the instructions on page 3.1, and move to page 3.2.

3. This luxury master bathroom has two rooms. The small toilet room has already been tiled, so your job is to tile the floor in the larger room. This room has a Jacuzzi bath with attached cabinet and a double sink. Your task is to tile this room around the fixtures with the given hexagon tiles. Grab and drag the black point on each piece to move it into the bathroom area. Grab and drag the white point on each piece to rotate it. Click the slider to start over.

    a. After you complete the tiling, record the number of different tile pieces you used and the fraction representation of each piece.

Tile piece	Fraction representation of the piece	Number of pieces used to tile the floor
	1	

    b. Calculate the number of tiles you need for this bathroom floor. Show the process you used to complete the calculations.

    c. These tiles cost $24.99 per tile. What is the cost of tiling the whole floor?