

Multiplying Whole Numbers

Performance Task Objectives

- Multiply up to 5-digit numbers by 1-digit numbers
- Multiply two 2-digit numbers
- Find the areas of rectangles and squares
- Estimate products

Sunshine State Standards

- MA.A.3.2.2
- MA.A.3.2.3
- MA.A.4.2.1
- MA.B.1.2.2

Materials

- Student recording sheet
- Color tiles
- Paper and pencil

Student arrangement

- Individual or small group

Task

Present the problem on the student Recording Sheet to your students.

Performance Criteria

- Can the student explain how he or she estimated the number of tiles needed?
- Can the student correctly determine the area of the individual floors and the entire building?
- Can the student correctly determine the cost of the tiles for one kitchen floor and the entire building?

Name _____

Solve this problem.

A 4-story apartment building has 15 apartments on each floor. The kitchen floors are being redone with new tile. The dimensions of the floor space to be tiled are 6 feet long by 4 feet wide. Ted, the tile man, has 1,500 one-foot square tiles.

ESTIMATION

Explain how you would **estimate** whether Ted has enough tiles to cover all the kitchen floors in the entire apartment building.

SOLVE THESE PROBLEMS

Answer the following questions by finding the **exact** answer.

1. How many tiles, each measuring 1 square foot, are needed to cover one kitchen floor? **Show your work.**
2. How many tiles are needed to cover all the kitchen floors in the entire 4-story apartment building? **Show your work.**
3. If tiles cost \$0.82 each, how much will it cost to tile one kitchen floor? **Show your work.**
4. How much will it cost for the tiles for the whole building? **Show your work.**