

Name: _____ Class: _____

Penny Rectangles

- A. Using the provided materials, work with your partner to determine how many different ways you can arrange 100 pennies in the shape of a rectangle. Each row must have the same number of pennies.

Use the table below to organize your answers. Some answers may be the same rectangle, oriented a different way.

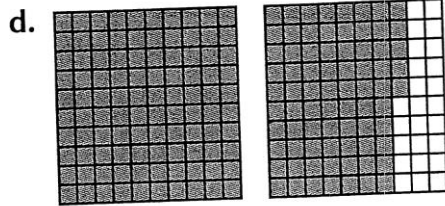
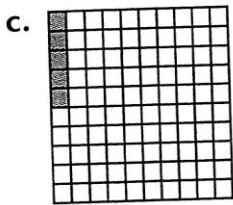
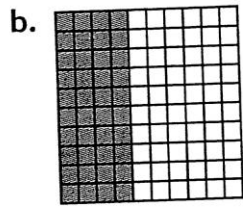
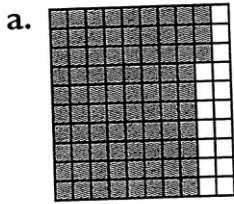
Describe the rectangle made with 100 pennies	Write one row as a fraction of the whole	Write the simplified fraction	Write the value of one row of money

What do you notice about the dimensions of the rectangles you found?

B. AREA MODELS

You can use area models to represent fractions and decimals.

1. Write the fraction represented by the shaded area of each square or squares. Then, write the corresponding decimal.

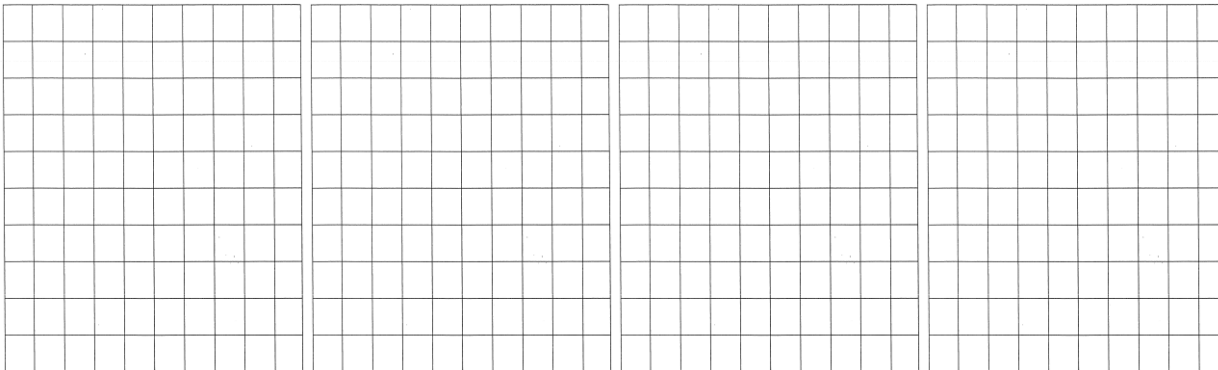


2. Draw an area model for each decimal.

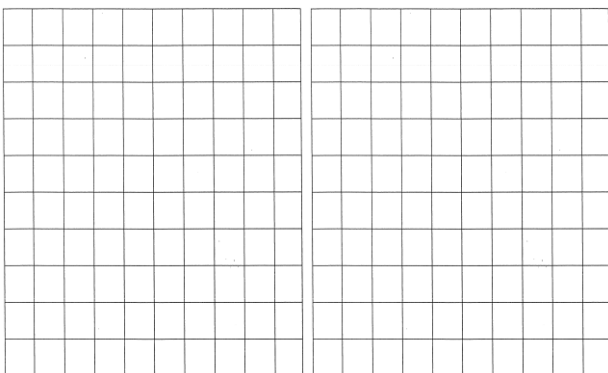
a. 0.4

b. 0.95

c. 1.10



d. 1.39



C. Decimal puzzle

With your partner, make and solve decimal puzzles. Cut out squares that are 10 cm by 10 cm.

1. Divide your square into at least four parts. Shade each part a different color. Try to make each part a different shape and size.
2. Carefully cut out the parts along the lines to create puzzle pieces. Trade puzzles with your partner.
3. Describe each piece of your partner's puzzle as a fraction of the whole and as a decimal. Then, try to put the puzzle together.
4. Write two number sentences that describe the puzzle. Use fractions in one number sentence and decimals in the other.

What do you notice about your decimal puzzle? What do you notice about the puzzle in terms of fractions?