2-51. SPECIAL PRODUCTS

Solutions are dependent upon the numbers picked by the teacher. For example, if 2, 5, 6, 4, and 1 are picked, the largest product is $541 \cdot 62 = 33542$.

2-52. MAXIMIZING AREA

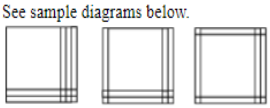
a. Answers will vary.

b. The dimensions of the rectangle are 9 tens and 2 ones by one ten and 8 ones. The product is represented by the area.

c. The product would have been smaller. See diagram below.

2-53. See below:

a. See sample diagrams below.



b. All rectangles have dimensions of 12 units by 13 units.

c. It breaks the dimensions into tens and ones.

d. Answers will vary, but the rectangle that groups the hundreds, tens, and ones together like Alan did in the previous problem makes it easier to see the total quickly.

e. The area is the same as the product of the dimensions. The area of 156 units can be determined by counting and adding or by multiplying.

2-54. See below:

a. It is the Base Ten Blocks' shape without all of the individual blocks drawn. He labeled the tens separately from the ones so the numbers represent length of the side of each section.

b. Students should realize the 100 represents the area measured in square units. The boxes should be filled in with $10 \cdot 10 = 100$, $3 \cdot 10 = 30$, $10 \cdot 2 = 20$, and $3 \cdot 2 = 6$

c. Likely responses: add the four areas to get 156 square units, or multiply 12 by 13 to get the same result.

d. See answer diagram below, the product is 2714.