

1. Draw array diagrams for these situations:

- a. 4 rows of chairs with 12 chairs in each row
- b. A garden plot that is 6 feet long and 3 feet wide
- c. 4×6

2. Draw a diagram for these situations:

- a. The number of different one scoop ice cream cones you could make with 3 kinds of cones and 8 kinds of ice cream.
- b. The number of different outfits you could wear with 6 shirts and 3 pairs of pants

3. Write a combination word problem similar to the problems in number 2.

4. Explain why the commutative property isn't obvious to a second grader (you may wish to choose a numerical example to illustrate your explanation).

5. a. Explain, using an appropriate, well labelled diagram and sentences, why it works and makes sense that $4 \times 6 = 6 \times 4$

b. What is the name of this property (spelling counts)

6. a. Explain, using an appropriate, well labelled diagram and sentences, why it makes sense that $3 \times 8 = 3 \times 5 + 3 \times 3$

b. What is the name of this property (spelling counts)