

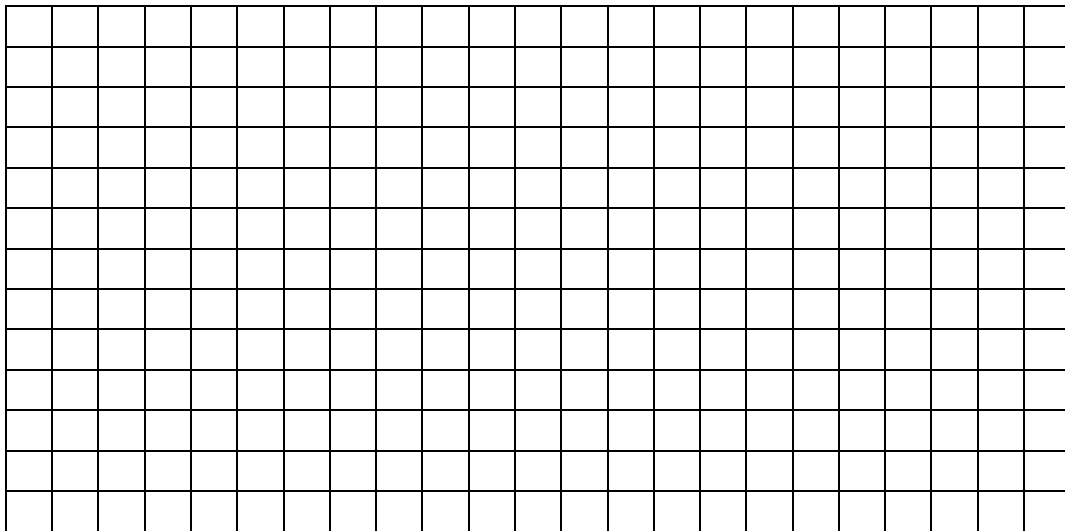
Name _____

Date _____

Distributive Property and Arrays

1) I am designing a garden in my back yard. One section of my garden is going to for vegetables and the other section of the garden is going to be for flowers. The two sections will be adjacent () to each other. The vegetable section is going to be 8 feet by 6 feet. The flower section is going to be 5 feet by 6 feet.

a) Draw a diagram of the two gardens.



b) What is the area of my entire garden? Write an expression and evaluate.

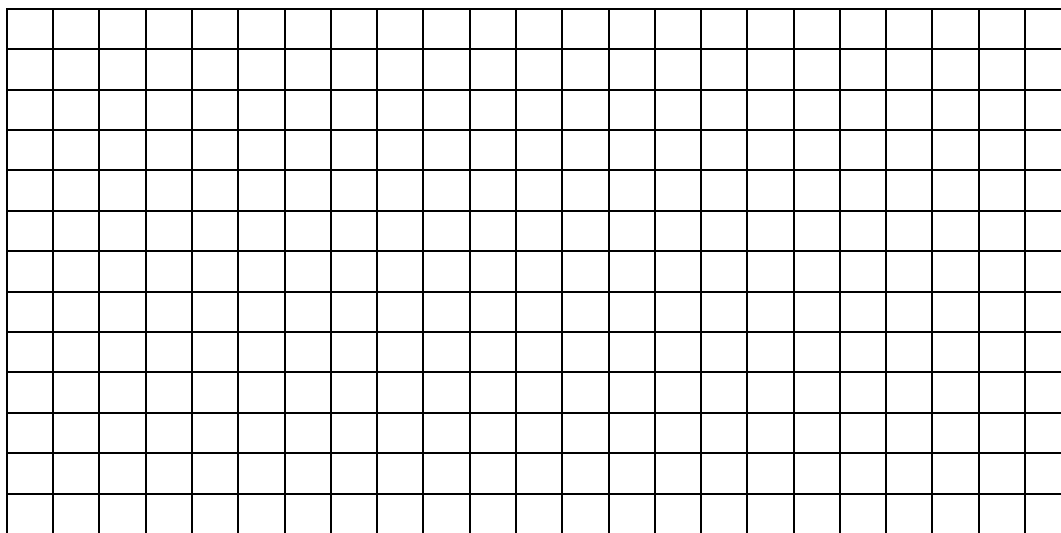
c) Find another way to calculate the area of the entire garden? Write an expression and evaluate.

d) Write an equation that shows that the two expressions are equal.

Distributive Property and Arrays

2) I am redesigning my kitchen and dining room. The kitchen is 10 feet by 8 feet and the dining room is 10 feet by 9 feet. The two rooms are adjacent () to each other.

a) Draw a diagram of the two rooms.



b) How much flooring do I need to order in total to cover the two rooms? Write an expression and evaluate.

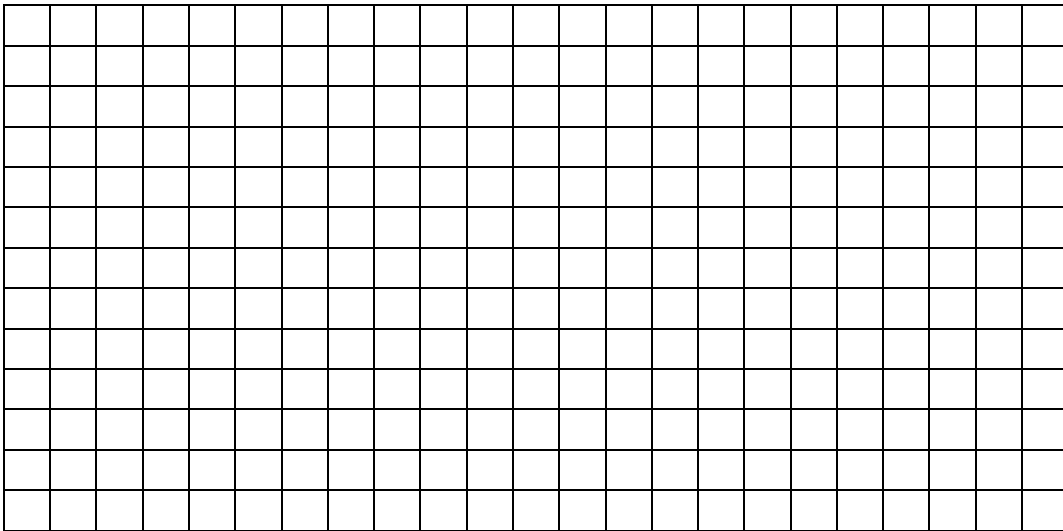
c) Find another way to calculate the area of the two rooms? Write an expression and evaluate.

d) Write an equation that shows that the two expressions are equal.

Distributive Property and Arrays

3) Off the back of my house is a wooden deck that needs to be replaced. I am going to build a brick patio adjacent () to the deck. The wooden deck is 5 yards by 3 yards. The patio is 3 yards by 4 yards. How many square yards of materials (wood and brick) do I need to buy for the deck and patio?

a) Draw a diagram of the deck and patio.



b) What is the combined area of my deck and patio? Write an expression and evaluate.

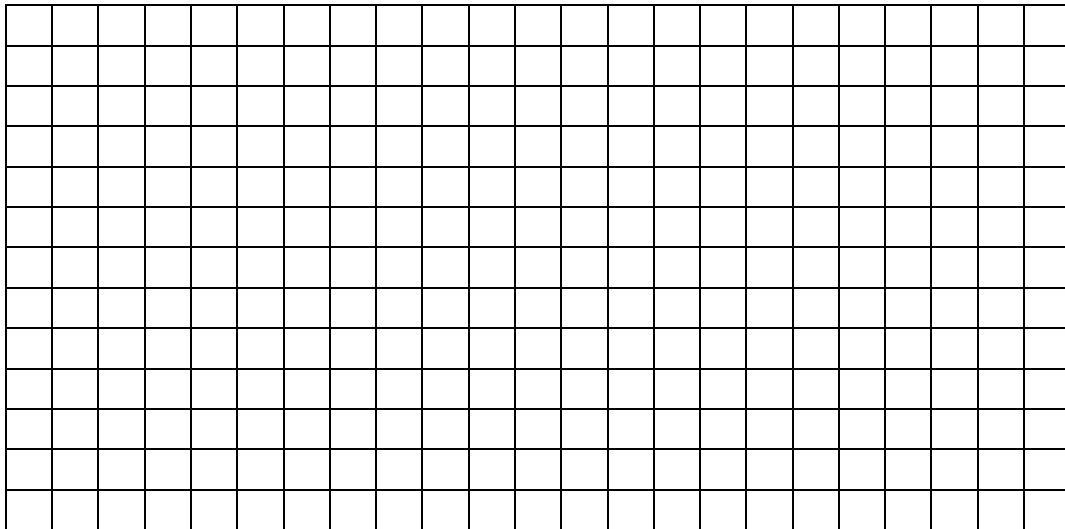
c) Find another way to calculate the combined area of the deck and patio? Write an expression and evaluate.

d) Write an equation that shows that the two expressions are equal.

Distributive Property and Arrays

4) The ceiling in my rectangular basement needs to be painted. One part of the basement is the playroom and is 4 yards by 8 yards. The other part of my basement is for utilities and is 8 yards by 2 yards. How many square yards of ceiling do I need to cover in total?

a) Draw a diagram of the two rooms.



b) What is the area of my basement ceiling? Write an expression and evaluate.

c) Find another way to calculate the area of my basement ceiling? Write an expression and evaluate.

d) Write an equation that shows that the two expressions are equal.