## Lesson 22: Problems About Perimeter and Area

* Let’s solve situations involving perimeter and area.

### Warm-up: How Many Do You See: Shaded Squares

How many shaded squares do you see? How do you see them?



### 22.1: Create a Class Banner

Jada’s teacher bought a poster paper that measures 36 inches by 24 inches. Her plan is to cut it into pieces, rearrange them, and tape them back together to create a welcome banner that is 8 inches tall and 8 feet long.



1. Does she have enough paper to make the banner? Show your reasoning.
2. How many square inches is the poster paper?

### 22.2: Replace the Classroom Carpet

A classroom is getting new carpet and baseboards. Tyler and a couple of friends are helping to take measurements.

Here is a sketch of the classroom and the measurements they recorded.



For each question, show your reasoning.

1. How many feet of baseboard will they need to replace in the classroom? How many inches is that?
2. 1,200 inches of baseboard material was delivered. Is that enough?
3. How many square feet of carpet will be needed to cover the floor area?



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