## Solve the following home area and perimeter problems

1. Imagine you have a rectangular living room that measures 12 feet in length and 10 feet in width. Calculate the area of the living room.
2. Now, let's say you want to install new carpeting in the living room. The cost of the carpeting is $\$ 25$ per square foot. Calculate the total cost of the carpeting for the living room.
3. Moving on to the dining room, which is also rectangular, with a length of 8 feet and a width of 6 feet. Calculate the perimeter of the dining room.
4. You decide to purchase a new dining table that is circular with a diameter of 4 feet. Calculate the area of the table.
5. Next, you want to hang wallpaper in your bedroom. The bedroom has four walls, each measuring 10 feet in width and 8 feet in height. Calculate the total area of the walls.
6. The wallpaper you choose comes in rolls that are 2 feet wide and 12 feet long. Calculate the number of rolls you will need to cover all the walls in your bedroom.
7. In the kitchen, you have a square-shaped countertop that measures 5 feet on each side. Calculate the perimeter of the countertop.
8. You want to add decorative tiles to the kitchen backsplash, which is rectangular with a length of 4 feet and a height of 2 feet. Calculate the area of the backsplash.
9. You find tiles that come in packs of 12 , and each tile is a square with a side length of 6 inches. Calculate the number of tile packs you will need to cover the entire kitchen backsplash.
10. Finally, you decide to reorganize your bookshelf. The bookshelf has five shelves, each measuring 3 feet in length and 1 foot in height. Calculate the total area of all the shelves combined.


## Team up with your friends and do the following activities

1. Living Room Rug: Measure the length and width of your living room. Calculate the area of the room and determine the appropriate size of a rug to cover a portion of the floor.
2. Wallpaper Border: Measure the length and height of one of the walls in your bedroom. Calculate the area of that wall and determine the amount of wallpaper needed for a border.
3. Tile Backsplash: Measure the length and height of the kitchen backsplash. Calculate the area of the backsplash and determine the number of tiles required for the entire area.
4. Window Curtains: Measure the width and height of a window in your dining room. Calculate the area of the window and determine the amount of fabric needed to create curtains.
5. Picture Frames: Measure the width and height of a picture frame you want to hang on the wall. Calculate the perimeter of the frame to determine the appropriate length of hanging wire.
6. Garden Fence: Measure the length of one side of your garden. Calculate the perimeter of the garden and determine the amount of fencing material needed to enclose the entire area.
7. Bookshelf Organization: Measure the width, height, and depth of each shelf in your bookshelf. Calculate the area of each shelf and determine the total area of all the shelves combined.
8. Carpet Tiles: Measure the length and width of a small room, such as a home office. Calculate the area of the room and determine the number of carpet tiles needed for the space.

