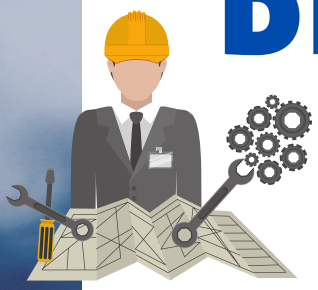


DESIGN A MUSEUM EXHIBIT

Solve these area and perimeter problems.

The staff of the NC Maritime Museum in Beaufort want to create a new exhibit about commercial fishing in North Carolina. The exhibits department staff have built five cases and need to create a diagram showing where they plan to put the cases in the exhibit. The cases include two square shape cases, two rectangle shaped cases, and one oval case.

Unfortunately, the papers that had the dimensions of the cases got wet and only some of the information survived. Using the information below work out the dimensions of the different cases. The rectangle cases are 10 feet tall and the square cases are 1.5 feet long. The oval case is just as wide as the square cases. The rectangle case's length is half of its height and the oval case's length is half of that. The square case is 7.5 feet tall, the same as the oval case, which is three times as tall as the oval case is long. Finally, the square cases are 0.5 feet longer than the rectangle cases' width.

Once you have figured out the dimensions of the display cases, cut out the shapes with the scale 1 foot = 1 inch. we know ceiling in the exhibit is 12 feet tall, so all of the cases will fit in regards to height, so you only need to worry about the length and width of the cases. On the next page the exhibit space is drawn out using the 1 foot=1 inch scale, place the shapes in the space to design the exhibit.

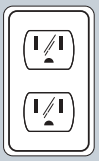
While most of the cases can be up against a wall, the designers want the visitors to be able to walk around and see all the sides of the square display cases. They want the oval case near at least one of the square cases. All of the cases except the oval need to be within 1 foot of their own electrical outlet. Most importantly, you need to leave 1.5 feet between all the cases for the visitors to walk and you can not block the doors or emergency exits. You can put a case in front of or on top of electrical outlets.

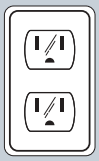
After successfully designing the exhibit, take a picture and send it to the NC Maritime Museum in Beaufort (christine.brin@ncdcr.gov)!

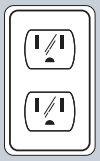
DESIGN A MUSEUM EXHIBIT

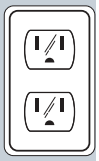
Scale:
1 inch = 1 foot

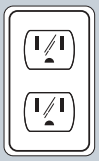
Entrance/Exit











Emergency Exit
DO NOT BLOCK

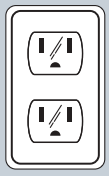


Exhibit Ceiling is
12 feet tall

Entrance/Exit