

You have been hired to install carpet in an 8 ft by 12 ft office building. The carpet costs \$2.50 per square foot. How much money will you need to spend on carpet?


8 ft

12 ft


Mr. Duncan is very picky about his coffee. He will only drink coffee out of cups whose top is circle with an area of at least $2,000 \mathrm{~mm}^{2}$. Help Mr . Duncan decide if the cup below is okay or not by finding the approximate area of the top.

## A triangular machine part is cut out of a

 rectangular piece of metal as shown below. What is the area of the triangle?


A sports team sent over the diagram for a new flag they want you to make, but one of the measurements got smudged. If the total area is supposed to be $22 \mathrm{ft}^{2}$, then what is the missing measurement?


All the lengths of the smaller triangle below were doubled to make the larger triangle. How much more area does the larger have than the smaller one?


Albright is thinking about getting fancy new portable buildings. The floor plan is shown below. What would the area of this new portable building be?

6 m
$4 m$



In the spring, farmers have to plant and fertilize their crops. The diagram below represents one farmer's land. He wants to fertilize all the land except for the small rectangle (that's where his house is!). How many square yards of land will he need to fertilize?

## 10 yd

## 20 yd



## You're building the dance floor for your

 new night club. You want the floor to be a 15 ft by 15 ft square. The tiles you plan to use for the dance floor come in pre-measured packages. Each package will cover $20 \mathrm{ft}^{2}$ of floor space. How many packages will you need to buy to cover the entire dance floor?

Find the area of the shape below: 12in


Your business is planning to make a new sign. Your boss only gave you enough paint to cover an area of $112 \mathrm{ft}^{2}$ and she said the sign must be a parallelogram that is 8 feet high. What is the widest the sign can be using only the paint you have?



A video game company is trying out designs for new hand held video games. The diagram for one possible design is shown below. What is it's area?

## 14 cm



When shooting a free-throw in basketball, the player must stand in the shaded half of the circle shown below. The circle has a radius of 6 ft . What is the approximate area of the shaded region?

