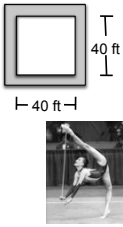


+ **Warm Up**

Find the area and perimeter of:

1. A rectangle with width of 7 cm and length of 12 cm.
2. A square with side length 15 inches.
3. The mat to the right is used for gymnastics floor routines. They must stay within the white lines. How much space does the gymnast have to perform in?
4. What is the length of tape needed to mark off the white lines?
5. A square has an area of 50 m^2 . What is the length of one side rounded to the nearest meter?

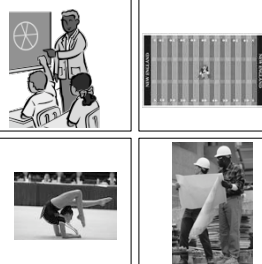


+ **Homework**

Answers

1. $P = 16 \text{ in}; A = 15 \text{ in}^2$
2. $P = 56 \text{ mm}; A = 196 \text{ mm}^2$
3. $P = 12 \text{ cm}; A = 9 \text{ cm}^2$
4. $P = 66 \text{ mm}; A = 260 \text{ mm}^2$
5. $P = 12 \text{ in}; A = 8 \text{ in}^2$
6. $w = 10 \text{ m}; A = 250 \text{ m}^2$
7. $S = 11 \text{ m}; P = 44 \text{ m}$
8. $l = 15 \text{ mm}; P = 50 \text{ mm}$
9. Area; 144 tiles
10. Perimeter; 42 m of fencing

+

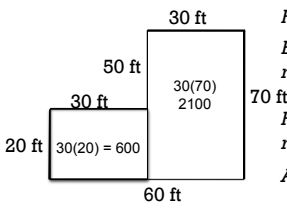


2.2 Perimeter & Area

Objective: Find the area and perimeter of composite shapes containing rectangles.

+ **Composite Shapes**

Ex A) Find the area and perimeter of the shape.



How do we find area?
Break the shape into rectangles.
Find the area of each rectangle.
Add to find the total area.

$2100 + 600$
 2700 ft^2

How do we find perimeter?
Add all the sides
 $60 + 70 + 30 + 50 + 30 + 20$
 260 ft

+ Composite Shapes

Ex B) Find the area and perimeter of the shape.

How do we find area?
Break the shape into rectangles.
Find the area of each rectangle.
Add to find the total area.

What's missing? $4000 + 1500$
 5500 ft^2

Add all the sides
 $P = 100 + 80 + 50 + 50 + 50 + 30$
 $P = 360 \text{ ft}$

+ Do YOU get it?

1) Find the area and perimeter of the shape.

Break the shape into rectangles.
Find the area of each rectangle.
Add to find the total area.

What's missing? $3375 + 2500$
 5875 m^2

Add all the sides
 $P = 45 + 25 + 50 + 50 + 95 + 75$
 $P = 340 \text{ m}$

+ Apply it

Ex C) You are fertilizing a lawn that is 30 feet by 50 feet. Find the area of the lawn, and then tell how many bags of fertilizer you'll need if each bag covers 400 ft^2 ?

What do you need to do first?
 $A = 30(50)$
 $= 1500 \text{ ft}^2$ *Does this answer the question?*

What do you need to do to answer the question?
 $\frac{1500}{400} = 3 \text{ r } 300$

You will need 4 bags of fertilizer.

+ Ticket to Leave

Draw a composite shape (like those from examples 1 & 2) that has an area of 100 m^2 . Be sure to label all the sides with the appropriate dimensions, and then find its perimeter.