Name _____

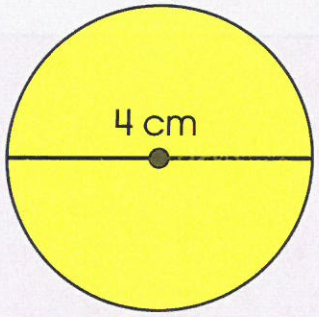
The Circle Game

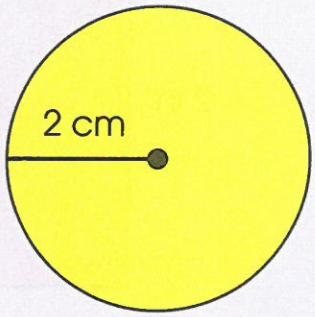
The perimeter of a circle is called the **circumference.** There is a formula for finding the circumference of a circle. The formula uses this special number **3.14**. We call this number **pi** (π). To find the circumference of a circle, use this formula:

Circumference = π x diameter
Circumference = πd

or

Circumference = π x 2 x radius
Circumference = $2\pi r$

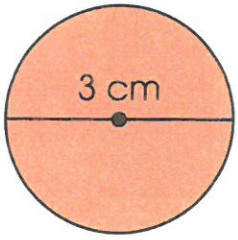




Examples:

C = πd	C = $2\pi r$
C = 3.14 x 4	C = 2 x 3.14 x 2
C = 12.56	C = 12.56

Directions: Find the circumference for each circle.



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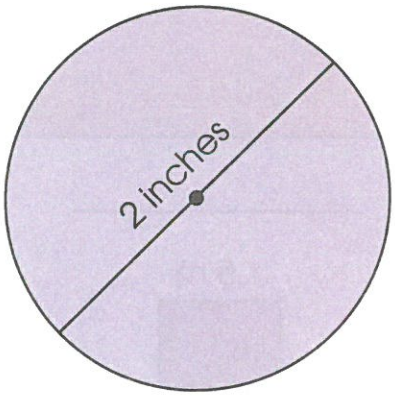

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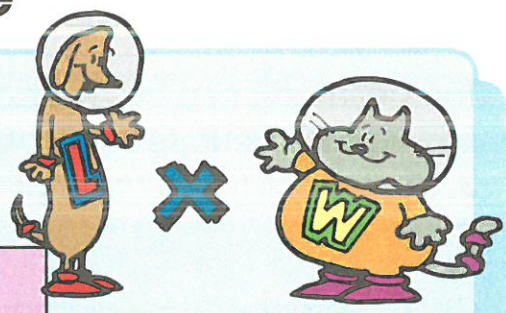
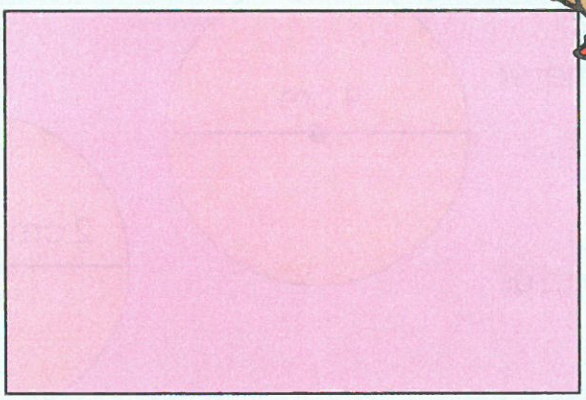
Name _____

Formula One

To find the **area** of a square or rectangle, multiply the length by the width.



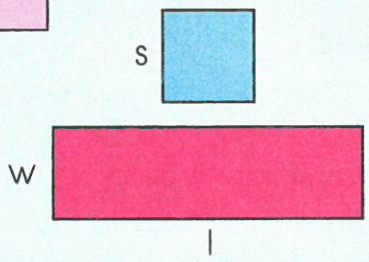
Example:



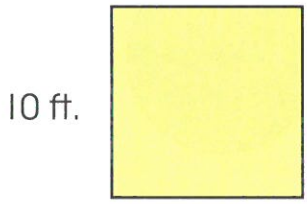
Area = 2 in. x 3 in.
= 6 square in.
= 6 $in.^2$

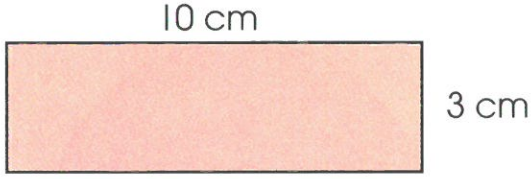
Area of a square = side x side = s x s = s^2

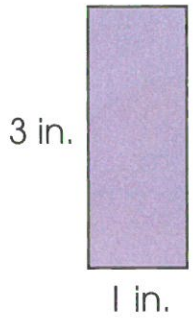
Area of a rectangle = length x width = l x w = lw



Directions: Find the area of each shape.







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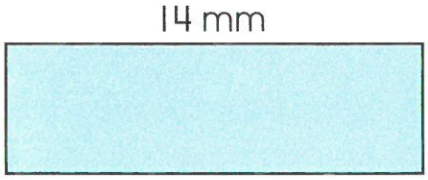
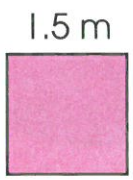
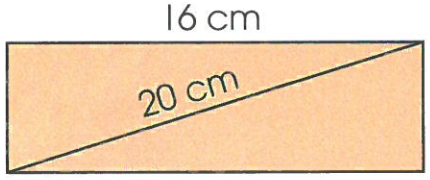






_____ _____ _____

Name _____

Area: Squares and Rectangles

The **area** is the number of square units that covers a certain space. To find the area, multiply the length by the width. The answer is in square units, shown by adding a superscript 2 (^{2}) to the number.

Examples:

3 in.

5 in.

8 in.

For the rectangle, use this formula: **A = l x w**
A = 8 x 5
A = 40 in.^{2}

For the square formula, **s** stands for side: **A = s x s** (or s^2)
A = 3 x 3 (or 3^2)
A = 9 in.^{2}

Directions: Find the area of each shape below.

7 ft.

12 ft.

1. Find the area of a room which is 12 feet long and 7 feet wide. A = _____
2. A farmer's field is 32 feet on each side. How many square feet does he have to plow? _____
3. Steve's bedroom is 10 feet by 12 feet. How many square feet of carpeting would cover the floor? _____
4. Two of Steve's walls are 7.5 feet high and 12 feet long. The other two are the same height and 10 feet long. How many square feet of wallpaper would cover all four walls?

   Square feet for 12-foot wall = _____ x 2 = _____

   Square feet for 10-foot wall = _____ x 2 = _____
5. A clothes shop moved from a store that was 35 by 22 feet to a new location that was 53 by 32 feet. How many more square feet does the store have now?

   Square feet for first location = _____

   Square feet for new location = _____ Difference = _____
6. A school wanted to purchase a climber for the playground. The one they selected would need 98 square feet of space. The only space available on the playground was 12 feet long and 8 feet wide. Will there be enough space for the climber?_____

Name _____

Volume of Prisms

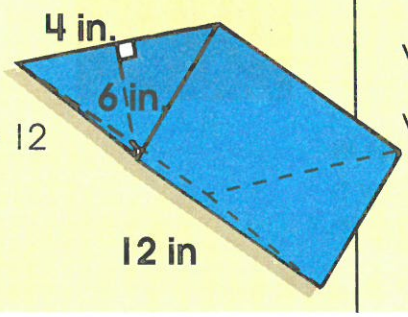
Volume is measured in cubic units.

Volume of a nonrectangular prism
= base area • height

$V = b \cdot h$

$V = (\frac{1}{2} \cdot 4 \cdot 6) \cdot 12$

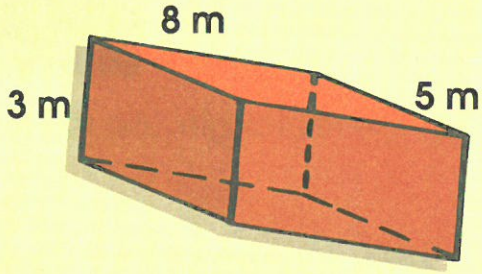
$V = 144 \text{ in}^3$



Volume of a rectangular prism
= l • w • h

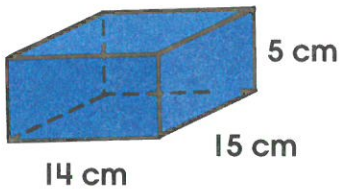
$V = 8 \cdot 5 \cdot 3$

$V = 120 \text{ m}^3$



Directions: Find the volume of each prism.

1.



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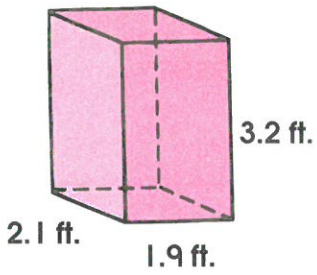

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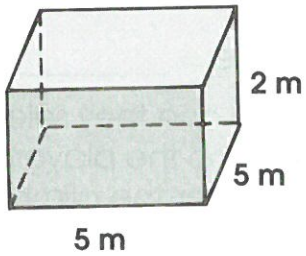

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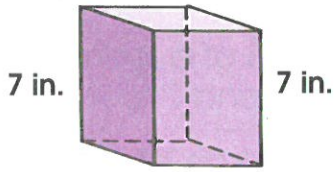

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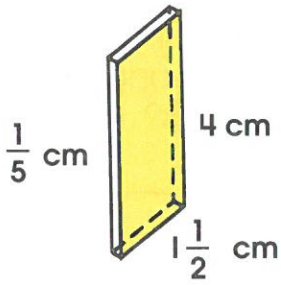

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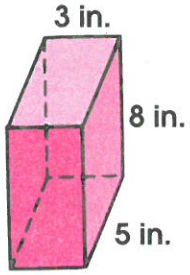

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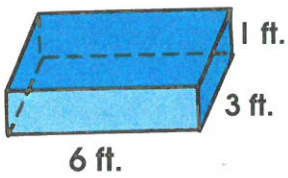
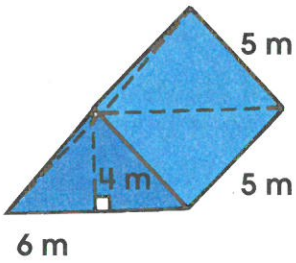
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