Study the following.

perimeter (puh-**rim**-uh-tur) - the distance around the outside of a figure. (I measured the perimeter of the swimming pool and it was 50 yards.) (The perimeter of the triangle was 6 inches.)

circumference (sur-**kuhm**-fur-uhnss) – the distance around the outside of a circle. Circumference is just a special word for the perimeter of a circle. (I measured the circumference of the lid of the jelly jar.)

P   - capital P stands for perimeter

C   - capital C stands for circumference

pi (**pye**) -   pi stands for the number 3.14159…. It is used for calculations related to circles. It is usually rounded to 3.14 when doing calculations. (I used pi to calculate circumference of the circle.)

π   - the symbol for pi (I used a π in my calculation.)

Say each word out loud and write it in the blank.

perimeter_____
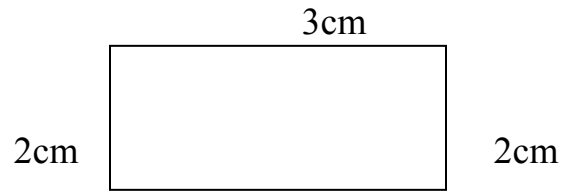circumference_____
pi_____

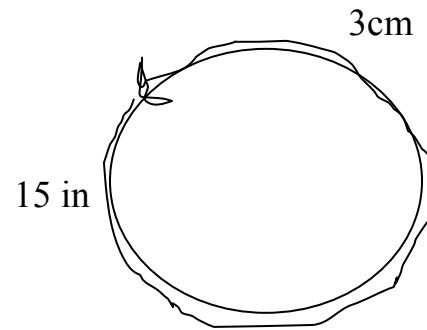**Write each definition in your own words.**

perimeter

circumference

pi

Study the following.

Perimeter = P = 2 + 3 + 2 + 3

          P = 10 cm

3cm

2cm   2cm

3cm

Circumference = C = 15in

15 in

Write two sentences using each word.

perimeter
1.

2.

circumference
1.

2.

pi
1.

2.

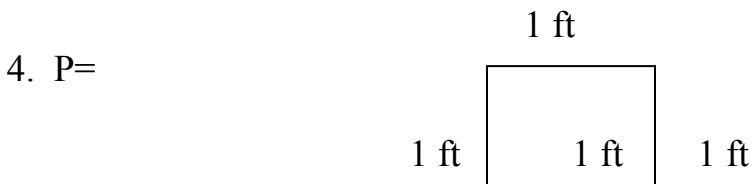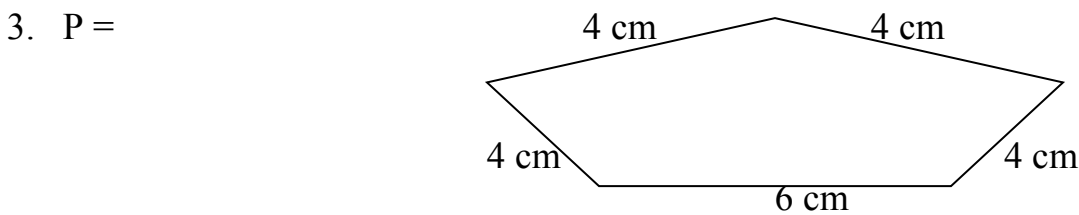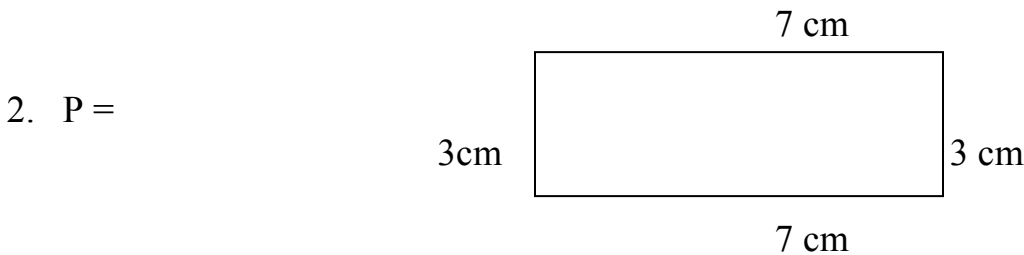## Matching.

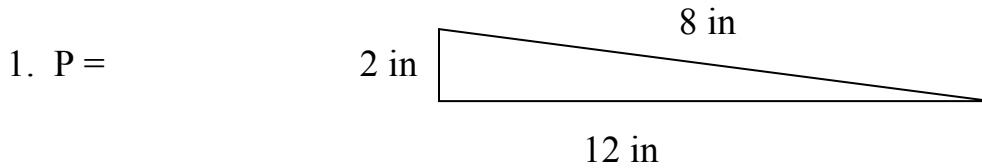perimeter   the distance around the outside of a
                                             circle

circumference   the distance around the outside of a
                                             figure

P   the number 3.14159….

C   Perimeter

π   Circumference

pi   symbol for pi

Calculate the perimeter (P).
Don't forget your units of measure (in., cm, ft, etc.)

1. P =   2 in

8 in

12 in

2. P =

7 cm

3cm   3 cm

7 cm

3. P =   4 cm   4 cm

4 cm   4 cm
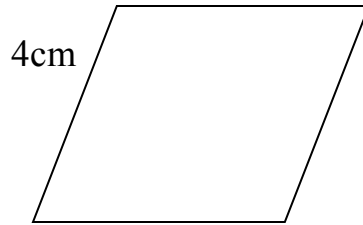
6 cm

1 ft

4. P=

1 ft   1 ft   1 ft

Study the following.

Perimeter of a square or a rhombus.

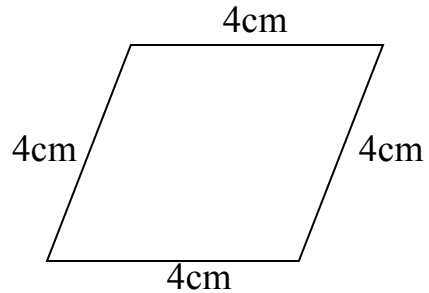Since all the sides or a square or rhombus are the same, you can label all the sides the same and add them up.

Example:

Given a rhombus with a side of 4cm.   4cm

Label all sides.   4cm

P = 4 + 4 + 4 + 4   4cm   4cm
P = 16 cm

4cm

Perimeter of a parallelogram or rectangle.

Since the opposite sides of a parallelogram or rectangle are equal, you can label the opposite sides the same, and then add them all up.

Example: 6in

Given a parallelogram   3in
With sides of 3in. and 6in.

6in

Label all sides.   3 in   3 in
P = 3 + 6 + 3 + 6
P = 18in.   6in
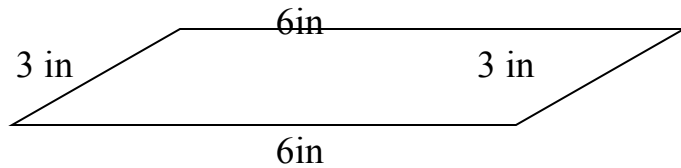
Find the Perimeter.
Remember the units of measure!

10 cm

1. P = _____

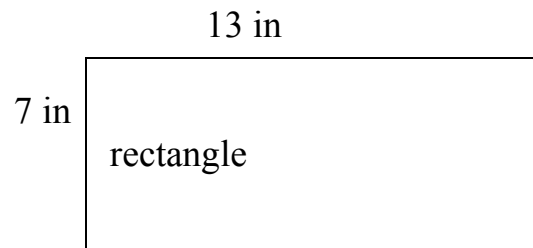4 cm | rectangle |

2. P = _____

| square | 2in.

3 yds

1 yard | parallelogram |

3. P = _____

6ft | rhombus |

4. P = _____
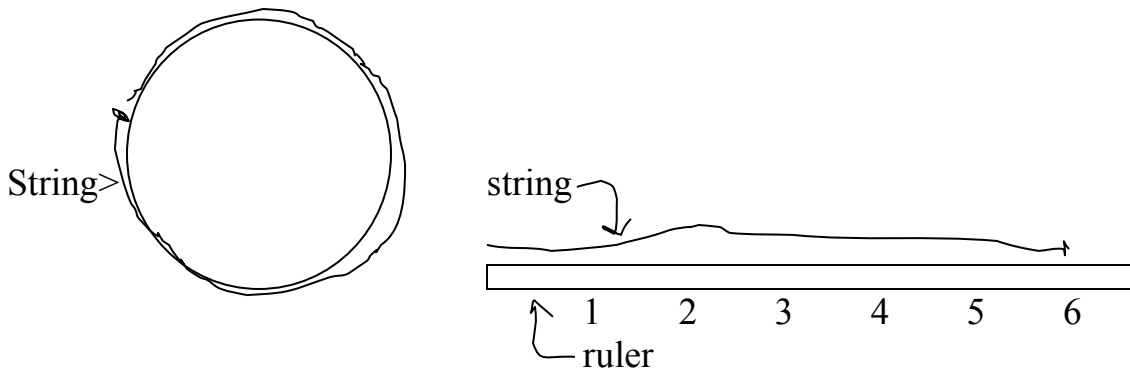
13 in

7 in | rectangle |

5. P = _____

6. P = _____

5cm | square |
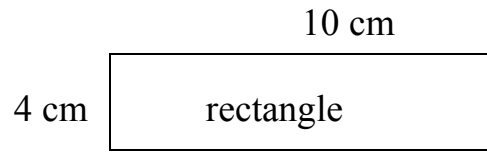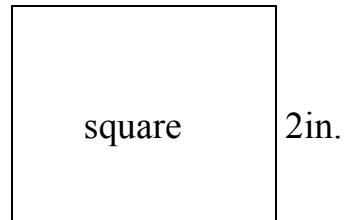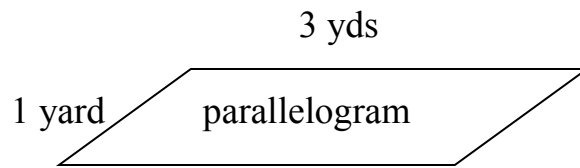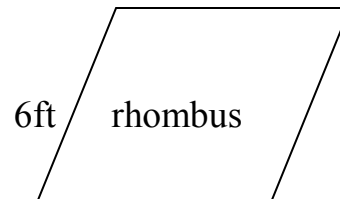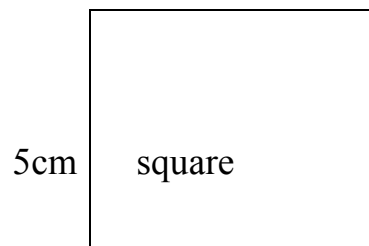
Study the following.

One way to measure circumference is to take a string or thread. Place it around the outside of the circle and mark the string when you get all the way around.
Now straighten the string and lay it against a ruler and measure up to your mark. This is the circumference.

String>

string

1   2   3   4   5   6
ruler

The string is 6 inches, so the circumference is 6in.

Get a string and a ruler and measure the circumference of the following circles in inches.

1.

2.

3.
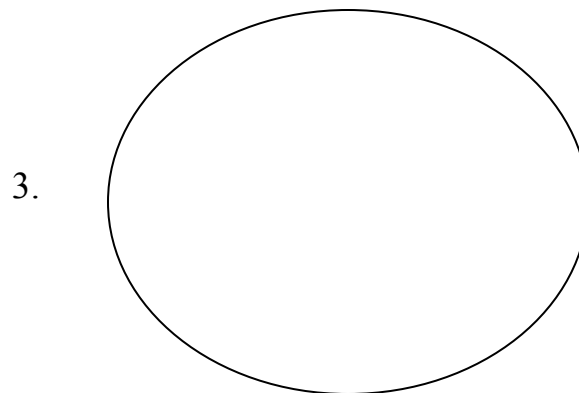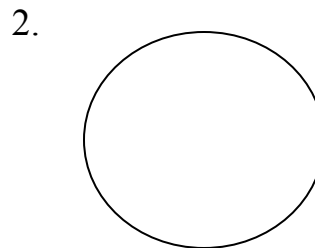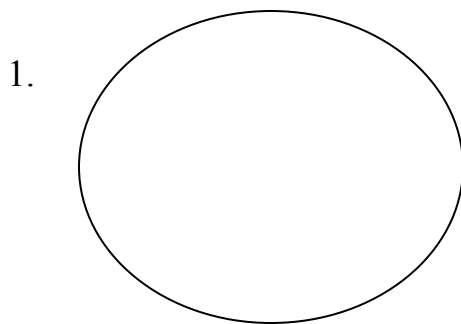
Study the following.

Here is a more accurate way to measure circumference.

Example:

d=10cm
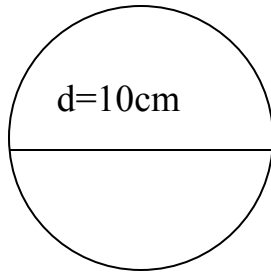
Circumference $= \pi \times$ diameter

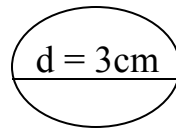(π is usually rounded to 3.14 when doing calculations.)

Circumference $= 3.14 \times 10 = \underline{31.4 \text{ cm}}$
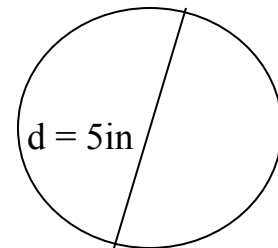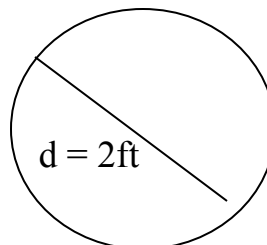
Find the circumference.

1. C = _____

d = 9 ft

2. C = _____

d = 3cm

3. C = _____

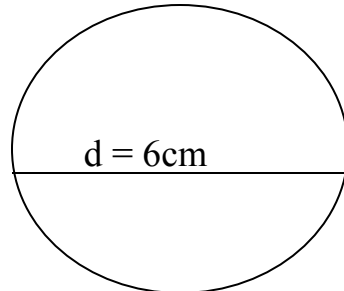d = 5in

4. C = _____

d = 2ft
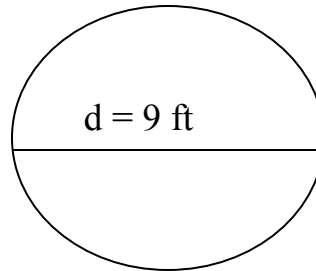
Study the following.

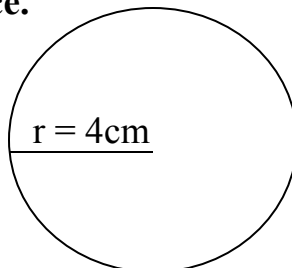If you are given the radius and not the diameter, multiply the radius by 2 to get the diameter.
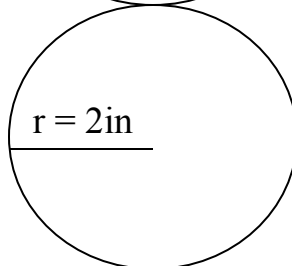
Example:

r = 3cm   3 × 2 = 6   →   d = 6cm
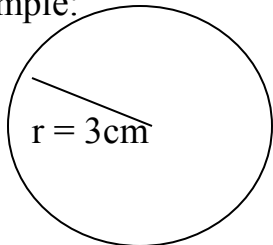
Then calculate the circumference. $C = \pi \times d$
$C = 3.14 \times 6$
$C = 18.84$ cm

Find the circumference.
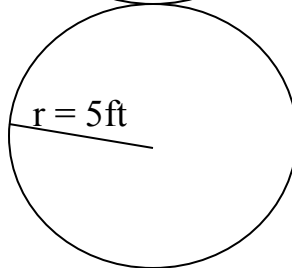
1. C =   r = 4cm

2. C =   r = 2in

3. C =   r = 5ft
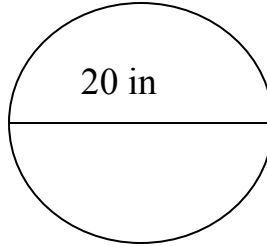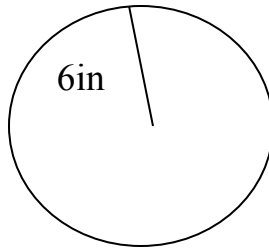
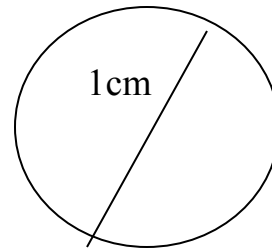Find the circumference. Remember units on your answers.
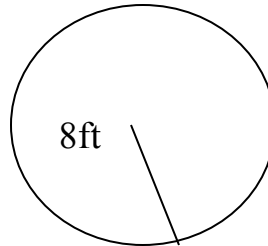
1. C = _____

20 in

2. C = _____

6in

3. C = _____

1cm

4. C = _____

8ft

5. radius = 3cm   C = _____

6. diameter = 4 feet   C = _____

7. radius = 7 cm   C = _____

8. diameter = 9 meters   C = _____