

Family Letter for Unit 6

Dear Family,

During the next few weeks, our math class will be learning about geometry and measurement.

You can expect to see various geometric figures, such as triangles, parallelograms, and circles. You may also see work involving measurements of these geometric figures. Here are some examples of the type of work you might see.

Vocabulary

perimeter The distance around a polygon.

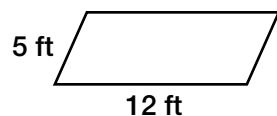
circle A closed figure in which every point is the same distance from a given point called the center of the circle.

circumference The distance around a circle.

pi A number approximately equal to 3.14 or $\frac{22}{7}$.

Perimeter

The perimeter of a polygon is the distance around the figure—the sum of the lengths of the sides. In a parallelogram, opposite sides are congruent (same length). If ℓ , w , and P represent the length, width, and perimeter of a parallelogram, $P = 2\ell + 2w$.



$$P = 5 + 12 + 5 + 12 = 34$$

OR

$$P = 2(12) + 2(5) = 24 + 10 = 34$$

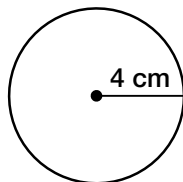
The perimeter is 34 ft.

Find the sum of the lengths of the sides.

Use the formula.

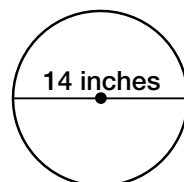
Circumference

The perimeter of a circle is called the circumference. The ratio of the circumference to diameter in all circles is denoted by the Greek letter π . The approximate value of π is 3.14 or $\frac{22}{7}$. The formula for the circumference of a circle, where r is the radius, d is the diameter, and C is the circumference, can be written two ways: $C = 2\pi r$ or $C = \pi d$.



$$\begin{aligned} C &= 2\pi r \\ &\approx 2 \times 3.14 \times 4 \\ &\approx 25.12 \end{aligned}$$

The circumference is about 25.12 centimeters.



$$\begin{aligned} C &= \pi d \\ &\approx \frac{22}{7} \times 14 \\ &\approx 44 \end{aligned}$$

The circumference is about 44 inches.

You can encourage your child to develop skill in using geometric formulas by using “What if . . .” situations, such as “What if I want to put edging around a circular piece of wood. How much edging would I need?”

Sincerely,



Technology

Check out *Education Place* at eduplace.com/map for e•Glossary, e•Word Games, test prep practice, and more.