



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.

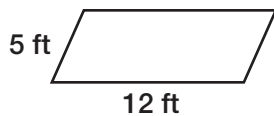
circle A closed figure in which every point is the same distance from a given point called the center of the circle.

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 or the sum of the lengths of the sides. In a parallelogram, opposite sides are congruent (same size). If ℓ , w , and P represent the length, width, and perimeter of a parallelogram, $P = 2\ell + 2w$.



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

The perimeter is 34 ft.

OR

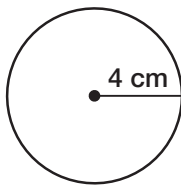
$$P = 2(12) + 2(5) = 24 + 10 = 34$$

Find the sum of the lengths of sides of the figure.

Use the formula.

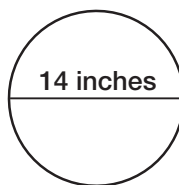
Circumference

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 $\frac{22}{7}$. Here are two formulas for the circumference of a circle, where r is the radius, d is the diameter, and C is the circumference, $C = 2\pi r$ and $C = \pi d$.



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

The circumference is 25.12 centimeters.

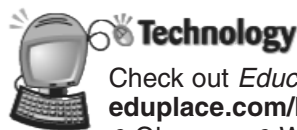


$$\begin{aligned}
 C &= \pi d \\
 &= \frac{22}{7} \times 14 \\
 &= 44
 \end{aligned}$$

The circumference is 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/kids/mw/ for e•Glossary, e•Word Games, test prep practice, and more.