

Objectives:

SWBAT define radians and explain how they are found.

Identify the important radian measures on a circle.

SWBAT convert between degrees and radians.

Why is a circle 360°?

The ancient Babylonians had a particular fascination with the number 60. Their number system was sexagesimal, meaning it was based on 60, which is evenly divisible by 2, 3, 4, 5, 6, 10, 12, 15, 20, and 30. They used a regular hexagon in which the length of each side was equal to the radius. Then the perimeter of the hexagon is six times the length of the radius. The circumference of the circle is approximately six times the length of the radius. This is why a full revolution of a circle is 360 degrees because 60 sides times 60 degrees equals 3600 degrees, which is 10 times 360 degrees.

