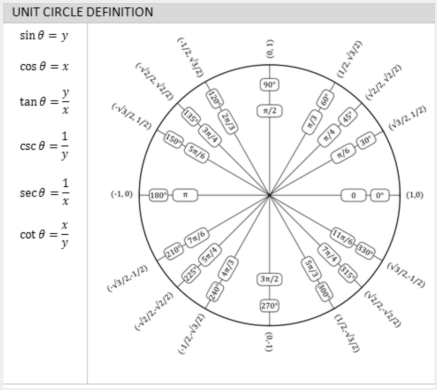
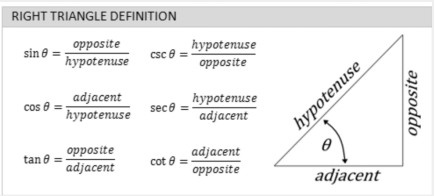
Unit Circle



Right Triangle Definitions



Difference Quotient

$$m_{sec} = \frac{\text{change in } y}{\text{change in } x} = \frac{f(x+h) - f(x)}{(x+h) - x} = \frac{f(x+h) - f(x)}{h}.$$

The slope formula f(x+h)−f(x)/ h fraction f . open , x plus h , close . minus f , open x close , over h end fraction is also known as a difference quotient, and it can be expressed in several ways depending on how the coordinates of P and Q are labeled. For example, given the coordinates

Secant Line

$$m_{sec} = \frac{f(x) - f(a)}{x - a}.$$

For example, given the coordinates P(a,f(a)) and Q(x,f(x)) p . open . eh comma f , open eh close . close . and . q . open . x comma f , open x close . close (Figure 1.11), the difference quotient is

Triangles