Given the trigonometric function

y = 120 sin ((Pi/6)*x - Pi/3) where x is in radians representing seconds

$$y = 120 \sin[\frac{\pi}{6}x - \frac{\pi}{3}]$$

The general form of the sine function is:

$$y = A \sin(Bx + C) + D$$

where:

A is the amplitude of the function

The period of the function is: $T = \frac{2\pi}{B}$

The phase shift of the function is: $\frac{C}{B}$

   a.

$A = 120$, therefore:

120 is the amplitude of the function.

   b.

$B = \frac{\pi}{6}$, $T = \frac{2\pi}{B} = 12$ - period

numbers cycles per second: $n = \frac{1}{T} = \frac{1}{12} Hz$

12 radians is the period of the function in seconds which is $\frac{1}{12}$ hertz.(cycles per second)

   c.

$\frac{C}{B} = -\frac{1}{2}$

1/2 radians is the phase shift right, because phase shift with the sign "-".