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Trigonometry Worksheet: Amplitude and Period (1)

The <u>amplitude</u> and <u>period</u> of a function of the form

$$y = a\cos(bx + c)$$
or
$$y = a\sin(bx + c)$$

are given by:

$$\text{amplitude} \ = \ |\,a\,| \qquad\qquad \text{period} \ = \ \frac{2\pi}{|\,b\,|}$$

<u>Example 1:</u> The amplitude and period of

$$y = -2\sin(-3x + \pi)$$

are given by: amplitude = | -2 | = 2 , period $= \dfrac{2\pi}{|-3|} = \dfrac{2\pi}{3}$

<u>Example 2:</u> The amplitude and period of

$$y = 0.5\cos(\pi x + \pi)$$

are given by: amplitude = | 0.5 | = 0.5 , period $= \dfrac{2\pi}{|\,\pi\,|} = 2$