## Exercise 167

For the following exercises, find a. the amplitude, b. the period, and c. the phase shift with direction for each function.

$$y = \sin\left(x - \frac{\pi}{4}\right)$$

## Solution

The amplitude is 1, the (positive) coefficient of the sine function.

The period is  $2\pi$  divided by 1, the coefficient of x, which is  $2\pi$ .

The phase shift is  $\pi/4$  units to the right.