Homework 16

1. Find the period and the amplitude and the y-intercept of

$$y = 4\sin\left(2x + \frac{2\pi}{3}\right).$$

   Graph one period. Label with coordinates the endpoints of that period, the highest and lowest points, and all intercepts in that period.

   State the phase fraction: the portion of a period that the graph was translated right ($+$) or left ($-$).

   This problem might be less confusing with the 2 factored out of the expression in the parentheses.

2. Find the period and the amplitude and the y-intercept of

$$y = 2\cos\left(3x - \frac{\pi}{4}\right).$$

   Graph one period. Label with coordinates the endpoints of that period, the highest and lowest points, and all intercepts in that period.

   State the phase fraction: the portion of a period that the graph was translated right ($+$) or left ($-$).

   This problem might be less confusing with the 3 factored out of the expression in the parentheses.