

The symmetric hyperbolic sine and cosine functions are defined as follows:

$$\text{sFs}(x) = \frac{\gamma^x - \gamma^{-x}}{\sqrt{5}} \text{ and } \text{cFs}(x) = \frac{\gamma^x + \gamma^{-x}}{\sqrt{5}}$$

where  $\gamma = (1 + \sqrt{5})/2$ . Also, the complex quasi-sine Fibonacci function is defined as

$$\text{cqsF}(x, n) = \frac{\gamma^x - \cos(n\pi x)\gamma^{-x}}{\sqrt{5}} + i \frac{\sin(n\pi x)\gamma^{-x}}{\sqrt{5}}$$

where  $\gamma$  is defined as before.

Write a MATLAB script that begins by defining these three functions and using these anonymous functions, plot the graphs of  $\text{sFs}(x)$  and  $\text{cFs}(x)$  against  $x$  over the range  $-0.01$  to  $4.02$ .