**Chapter 9, Solution 2.**

(a) amplitude = **15 A**

(b) $\omega = 25\pi = \mathbf{78.54\ rad/s}$

(c) $f = \frac{\omega}{2\pi} = \mathbf{12.5Hz}$

(d) $I_s = 15\angle 25^\circ$ A

$I_s(2\text{ ms}) = 15\cos((500\pi)(2\times10^{-3}) + 25^\circ)$

$= 15\cos(\pi + 25^\circ) = 15\cos(205^\circ)$

$= \mathbf{-13.595\ A}$