## EE 211 - Homework 14

Dec. 2, 2019

Name $\qquad$

1. For the series-parallel circuit shown in the figure below, find $v(t)$ given that $v(0)=0 \mathrm{~V}$ and $i(0)=1 \mathrm{~A}$.

2. For the circuit shown in the figure below, suppose that $v_{s}(t)=10 \cos (2 t)+10 \sin (2 t) \mathrm{V}$, find $i(t)$.

3. (a) Express the following as a single complex number in exponential form

$$
\frac{20(1+j)}{4+j 3} e^{-j 30^{o}}
$$

