Step-1

Consider the complex numbers: $3+4i$ and $1-i$.

a) Let $z_1 = 3+4i$ and $z_2 = 1-i$.

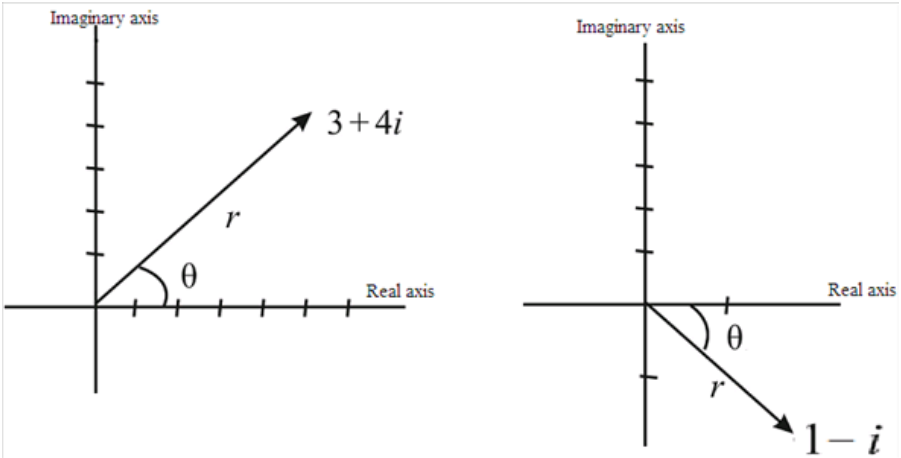
These complex numbers can be taken as ordered pairs $z_1(3,4)$ and $z_2(1,-1)$.

Here, the ordered pair $(3,4)$ lies in the first quadrant.

And also, the ordered pair $(1,-1)$ lies in the fourth quadrant.

Step-2

Now, the positions of complex numbers in the argand plane is shown below



Step-3

b) Find the sum and product of the given complex numbers as follows.

$$
\begin{aligned}
\text{sum} &= (3+4i)+(1-i) \\
&= 3+4i+1-i \\
&= (3+1)+i(4-1) \\
&= 4+3i
\end{aligned}
$$

$$
\begin{aligned}
\text{Product } &= (3+4i)(1-i) \\
&= 3(1-i)+4i(1-i) \\
&= (3-3i)+(4i-4i^2) \\
&= 3-3i+4i-4i^2
\end{aligned}
$$

$$
\begin{aligned}
&= 3-3i+4i-4(-1) \\
&= 3-3i+4i+4 \\
&= 7+i
\end{aligned}
$$

Hence, the sum of the given complex numbers is $\boxed{4+3i}$ and the product is $\boxed{7+i}$.

Step-4

c) Find the conjugate and absolute values of the given complex numbers.

Conjugate of $3+4i$ is $\overline{3+4i}$

Where $\overline{3+4i} = 3-4i$

Therefore, the conjugate of $3+4i$ is $\boxed{3-4i}$.

Absolute value of $3+4i = |3+4i|$

$$
\begin{aligned}
&= \sqrt{3^2+4^2} \\
&= \sqrt{9+16} \\
&= 5
\end{aligned}
$$

Therefore, the absolute value of $3+4i$ is $\boxed{5}$.

Step-5

The conjugate of $1-i$ is $\overline{1-i}$.

Where $\overline{1-i} = 1+i$

Therefore, the conjugate of $1-i$ is $\boxed{1+i}$.

Absolute value of $1-i = |1-i|$

$$= \sqrt{1^2 + (-1)^2}$$
$$= \sqrt{1+1}$$
$$= \sqrt{2}$$

Therefore, the absolute value of $1 - i$ is $\boxed{\sqrt{2}}$.

Since both absolute values are 5 and $\sqrt{2}$.

These values are more than 1.

The unit circle has radius 1 unit.

Hence, both the numbers lies outside the unit circle.