

2-5.16.

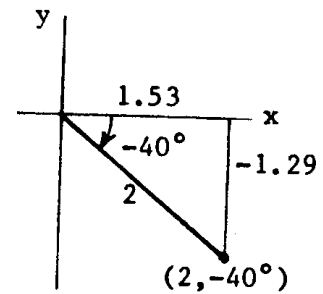
We can write

$$\frac{1}{0.5(\cos 40^\circ + i \sin 40^\circ)} = \frac{1}{0.5e^{i(40^\circ)}} = 2e^{-i(40^\circ)}.$$

Then we can plot the point with polar coordinates  $(2, -40^\circ)$  and find

$$x = 2 \cos 40^\circ = 1.53$$

$$y = -2 \sin 40^\circ = -1.29.$$



The five ways of labeling the point are

$(1.53, -1.29)$ ,  $1.53 - 1.29i$ ,  $(2, -40^\circ)$ ,  $2(\cos 40^\circ - i \sin 40^\circ)$  or  $2(\cos 0.7 - i \sin 0.7)$ ,  $2e^{-0.7i}$ .

(Note that if we mean degrees we must say so; if an angle is not labeled as degrees, then it is understood to be in radians.)