

4.1(a) If $A = 1+i$ + $B = 1-i$, what are $A+B$ in phasor notation? Graph $A+B$.

(b) Calculate AB and $A+C$ using complex notation or phasor notation.

(c) If $A = 1+i$ and $B = 2-2i$, calculate the angle that $A+B$ makes with the real axis.

(d) For general A and B , prove

$$\cos A \cos B = \frac{1}{2} [\cos(A+B) + \cos(A-B)]$$

using Euler's Formula.