

PROBLEM:

Evaluate the following and give the answer in both rectangular and polar form. In all cases assume that $z_1 = -4 + j2$ and $z_2 = -1 - j$.

(a) z_1^*

(b) z_2^2

(c) $z_1 + z_2^*$

(d) jz_2

(e) $z_1^{-1} = 1/z_1$

(f) z_1/z_2

(g) z_2/z_1

(h) $z_1 z_1^*$

(i) $z_1 z_2$

NOTE: z^* means the “conjugate” of z .