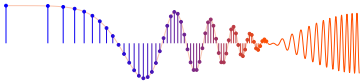

PROBLEM:

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

(a) Conjugate: z_1^*
(b) jz_2
(c) z_2/z_1
(d) z_2^2
(e) $z_1^{-1} = 1/z_1$
(f) $z_1 z_1^*$
(g) $z_1 + z_2^*$
(h) z_1/z_2
(i) $z_1 z_2$

Note: z^* means the "conjugate" of z.

McClellan, Schafer and Yoder, *Signal Processing First*, ISBN 0-13-065562-7.
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