

## PROBLEM:

Evaluate the following and give the answer in both rectangular and polar form. In all cases assume that

$$z_1 = -4 + j2 \text{ and } z_2 = -1 - j.$$

(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)  $z_1 z_2$