Special Problem II.A-7

A mixer with a conversion loss of 6 dB has a signal at its RF
port of –15 dBm.

    a)   What is the power of the signal at the IF port,
            provided that the LO power equals the mixer drive
            power?

    b)   Say the LO power drops 10 dB below the mixer drive
            power. What is the power of the IF signal now (where
            P_{RF} = -15 dBm, as before) ?