Special Problem II.B-26

In the microwave circuit below, a **fixed attenuator** with 6 dB of attenuation is followed by an **RF amplifier**, a **mixer**, and an **IF amplifier**.

The mixer manufactuer has stated that its **1 dB compression point** is 4.0 dBm.

The amplifier manufactuer has stated that each amplifier has a **1 dB compression point** of 20.0 dBm.

Determine the **largest possible** value of P_{in} such that **none** of the components are in compression (i.e., saturation).