Special Problem II.A-42

An amplifier has a **single** input signal with power of –20 dBm.

The amplifier **output** includes a **first-order** signal with power of 0 dBm.

The output **also** includes a **third-order** product whose power is –70 dBm.

Determine:

1. The **gain** of the amplifier.

2. The **3rd order intercept point** of the amplifier.

3. The power of the **third order** product if the **input** signal power is **decreased** 15 dB.