

Special Problem II.A-50

Delivered to the **input** of a microwave amplifier is a **-20 dBm** signal at a frequency of **1 GHz**.

The **output** of the amplifier includes a **-70dBm** signal at **3 GHz**.

The **third-order intercept** point of this amplifier is **+35 dBm**.

Determine the **gain** of this amplifier.