Special Problem II.A-41

An amplifier has a **second order intercept point** of 30 dBm.

It likewise has a **third order intercept point** of 20 dBm.

A signal at 100 MHz with a **power** of 0.01 mW is delivered to the **input** of the amplifier (i.e., no power is reflected).

At the **output** of the amplifier there are signals at 100 MHz, 200 MHz , and 300 MHz.

The output signal at **100 MHz** has a power of 0.2 mW.

Determine the **power** of the output signal at **200 MHz**.