

Special Problem 7.A-1

For the communications link below, the receive and transmit antennas are **identical**.

This antenna is a very efficient **parabolic reflector**.

The transmitter operates at 3 GHz, and delivers 10.0 Watts to the antenna.

A received power of $(0.01)\pi^2$ mW is delivered to the receiver.

Determine the **diameter** of the reflector antenna.

