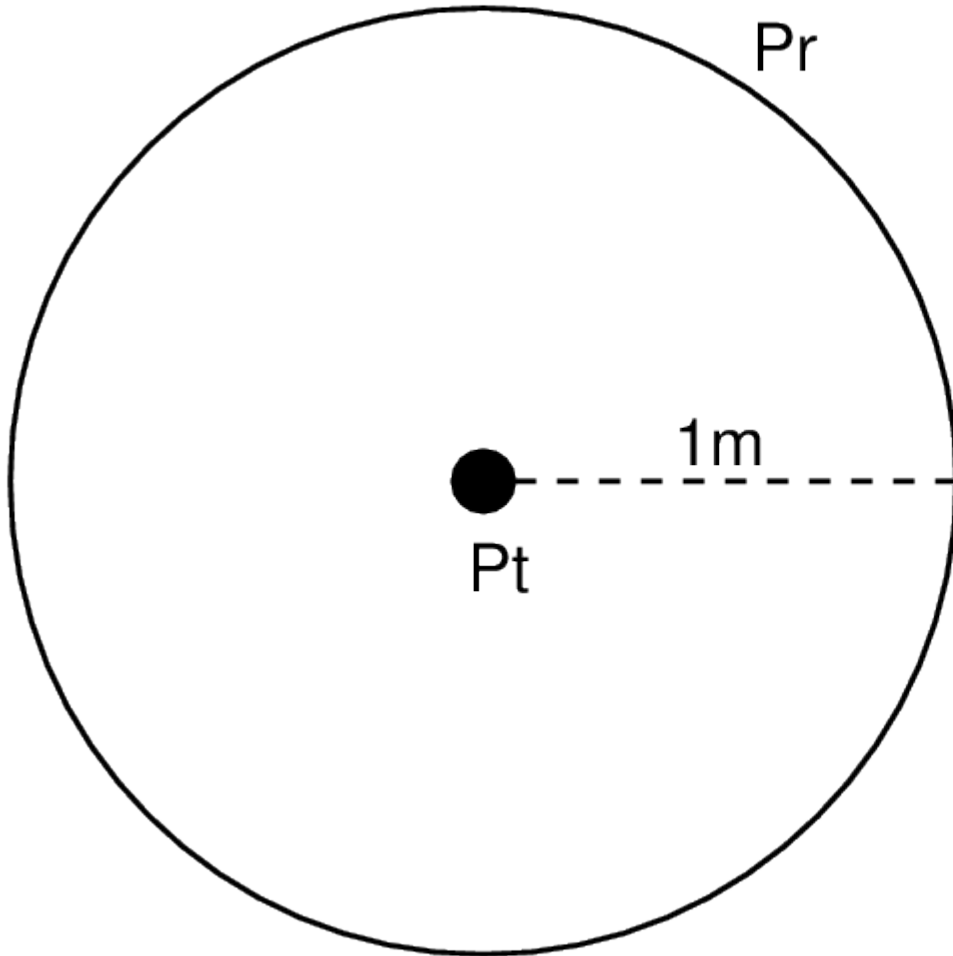
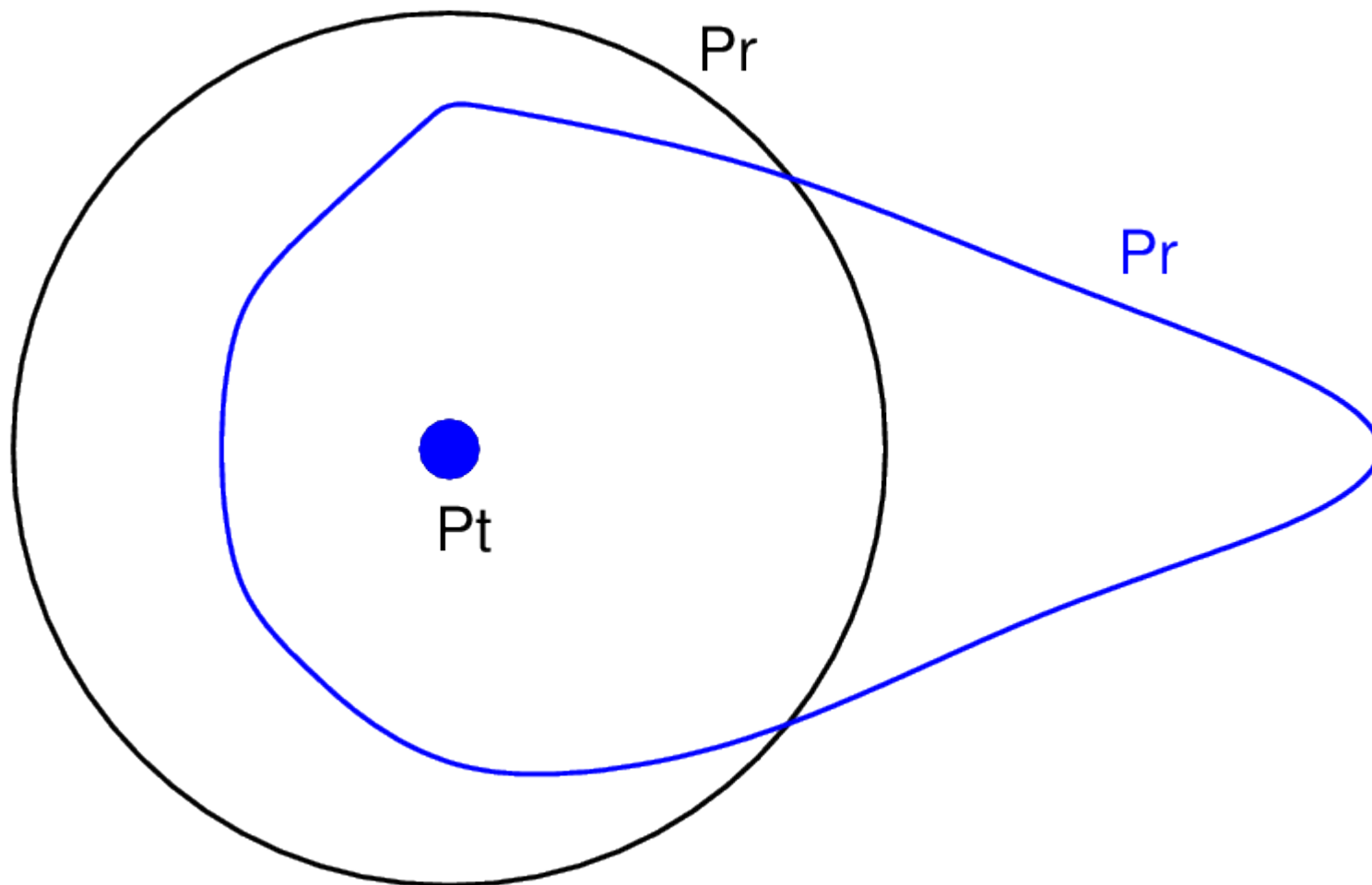


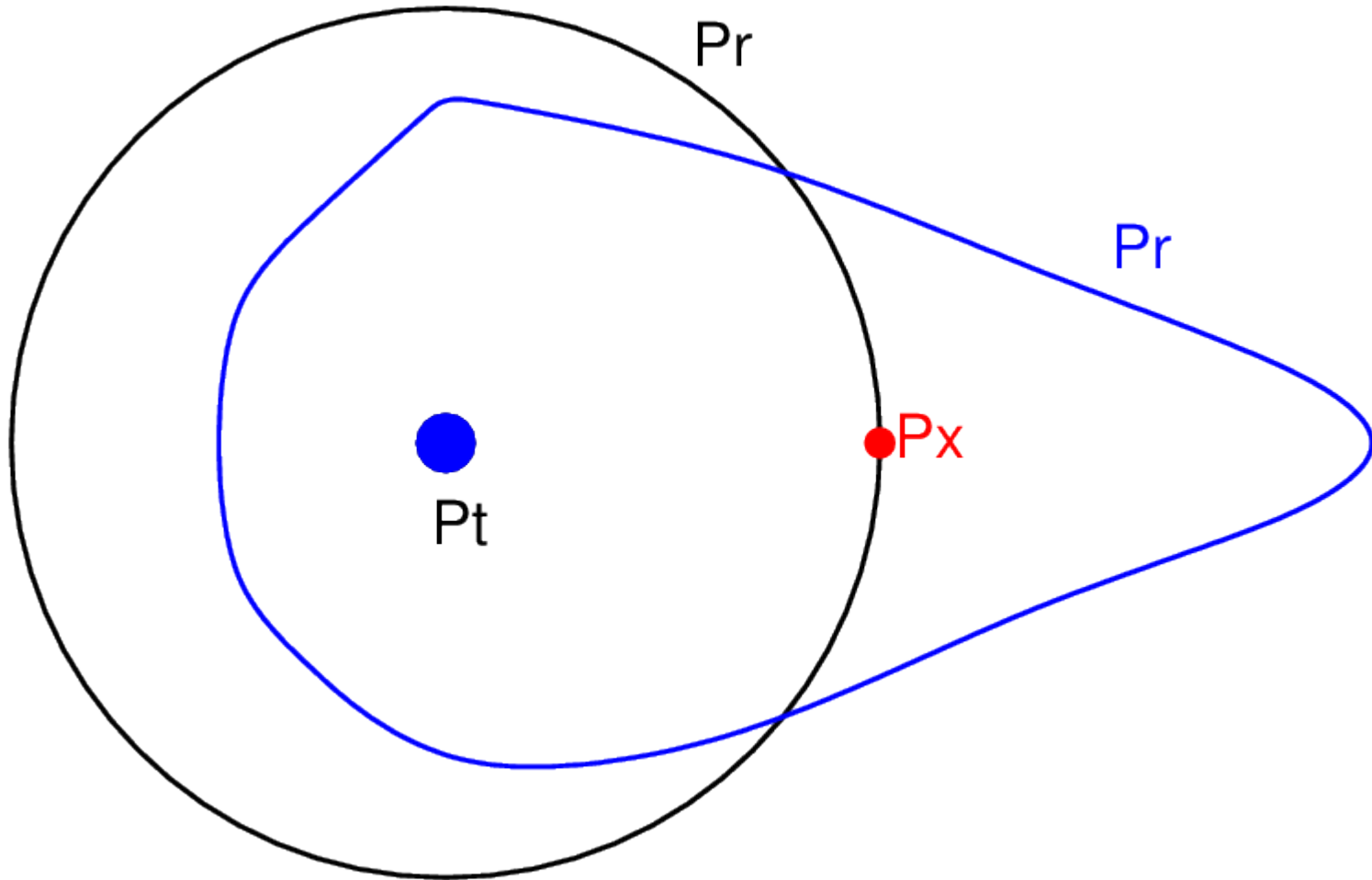
Isotropic antenna. Transmit with power P_t . Power received at all points 1m away is P_r



Directional antenna. Transmit with power P_t . Power received at all points on blue line is P_r (the same power level as 1m away from isotropic)



At the red point (1m away from directional antenna), power received is P_x .
 P_x is greater than P_r



The gain of the blue directional antenna is the ratio between power received 1m away from directional antenna (P_x) and power received 1m away from isotropic antenna (P_r)

