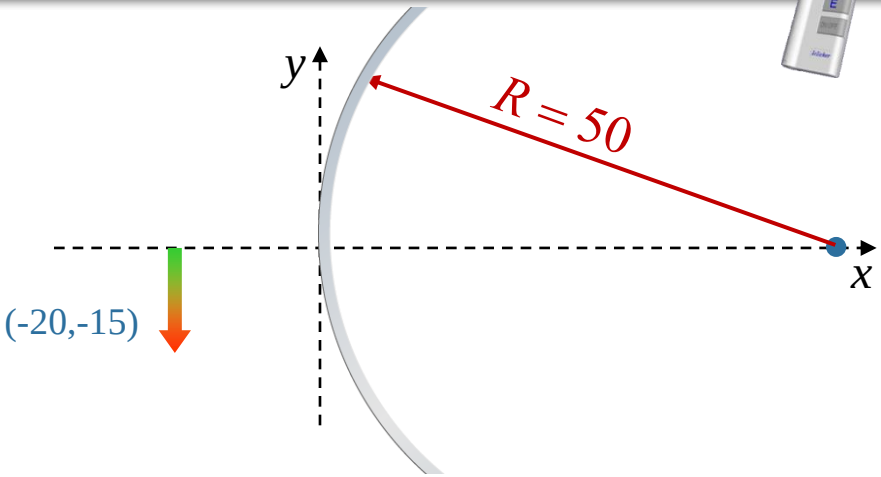
Calculation

An arrow is located in front of a convex spherical mirror of radius $R = 50\text{cm}$.
The tip of the arrow is located at $(-20\text{cm}, -15\text{cm})$.

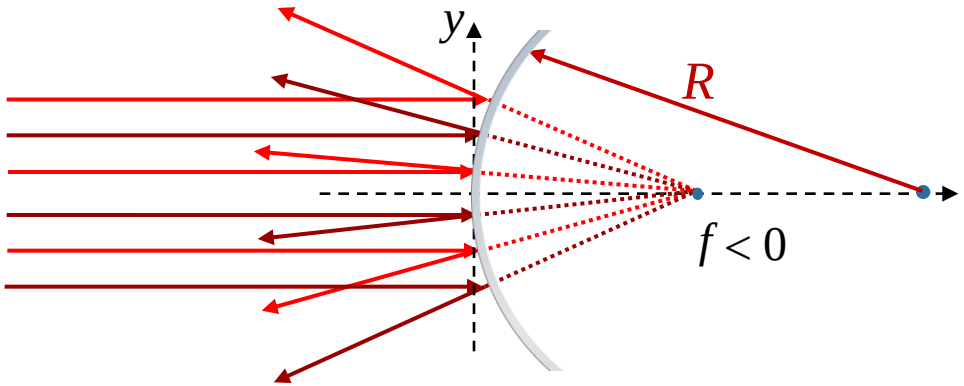


What is the focal length of the mirror?

A) $f = 50\text{cm}$ B) $f = 25\text{cm}$ C) $f = -50\text{cm}$ D) $f = -25\text{cm}$

For a spherical mirror $|f| = R/2 = 25\text{cm}$.

Rule for sign: Positive on side of mirror where light goes after hitting mirror



$f = -25\text{ cm}$