

Execute the necessary research to find the equation that is used to calculate the Schwarzschild radius of a black hole. Hint: This equation should only involve the mass of the collapsed star, the speed of light, and a physical constant known as the Universal Gravitational Constant

After many different types of astronomical measurements, it is now believed that Cygnus X-1 is a black hole.

a. Execute the necessary research to find the location of this black hole relative to earth.

3. Solve your equation found in Question 1 for each of the following variables:

a. the Universal Gravitational Constant

b. the mass of the star that collapsed to form the black hole

c. the speed of light