

Name _____

The Cosmic Giants: How Big Can a Black Hole Be?

Multiple Choice Questions

1. What is the primary factor that determines the size of a black hole?
 - A) Its age
 - B) The mass of the star that formed it
 - C) Its distance from Earth
 - D) The amount of radiation it emits

2. What is the mass range of stellar-mass black holes?
 - A) Three to twenty times that of our sun
 - B) Hundreds to thousands of times that of our sun
 - C) Millions to billions of times that of our sun
 - D) More than sixty-six billion times that of our sun

3. How do supermassive black holes primarily increase in size over time?
 - A) By absorbing nearby planets
 - B) By merging with other black holes
 - C) By emitting intense radiation
 - D) By undergoing rapid expansion

4. What is the Eddington limit, and what does it determine regarding black hole growth?
 - A) It is the maximum distance a black hole can travel in space.
 - B) It is the point at which a black hole becomes invisible.
 - C) It is the limit beyond which a black hole cannot grow due to radiation pressure.
 - D) It is the speed at which a black hole can escape from a galaxy.

5. Which black hole is considered one of the largest known black holes in the universe?
 - A) Stellar-mass black hole
 - B) Intermediate-mass black hole
 - C) Supermassive black hole
 - D) TON 618 black hole

