

HL Paper 3

- a. Outline what is meant by a black hole. [2]
- b. An observer views a distant spacecraft that is 23.0 km from the centre of a black hole. The spacecraft contains a clock that ticks once every second and the ticks can be detected by the distant observer. In 2.00 minutes the observer counts 112 ticks of the clock. [3]
- Determine the mass of the black hole.
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