

A level Physics B

H557/01 Fundamentals of physics

Question Set 17

1 (a) A video file is downloaded at a rate of 24 Mbit s^{-1} . The video file is 1.2 Gbytes in size.
Show that the time taken for the file to download is greater than 6 minutes. [2]

(b) The video file contains a soundtrack sampled at 16.0 kHz.
State and explain the highest frequency of sound that can be recorded on the soundtrack.

highest frequency kHz [2]

Total Marks for Question Set: 4

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