**Primer on Semiconductors: Lecture 2.5 Short Problem**

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Provide a numerical answer to the question below.

Compare the DOS of Si to GaAs for the follow two cases.

1. **Assume 3D electrons and assume  for Si and for GaAs. What is the ratio  ?**

**2) Repeat problem 1) for 2D electrons and assume  for Si and for GaAs. What is the ratio  ?**

What do you conclude from this exercise?