

2019 Ph H1 Q4

Section: Our Dynamic Universe

Topic: Motion – Graphs of Motion

Question Summary

A car accelerates from rest along a straight road at **constant acceleration**.

Which pair of **s–t** and **a–t** graphs represent this motion?

 **Final Answer:**

A

Working

- **s–t graph:** Displacement increases non-linearly (curve upwards).
 - **a–t graph:** Constant positive acceleration = horizontal line above zero.
 - Pair A matches this pattern.
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Quick Tips

- Constant acceleration \rightarrow s–t graph is a curve (parabolic).
 - Acceleration–time graph is a horizontal line.
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