Name:

Motion #2 (Part B / Acceleration)

Acceleration A brand new ride has opened at King's Island. Use the information provided to answer the questions.

1. The ride starts at rest and then gets up to a speed of 50 m/s in 1.9 s. What is its acceleration?

2. Once it is traveling at $50\,\mathrm{m/s}$, it accelerates at a rate of $-9.2\,\mathrm{m/s^2}$ for $3.0\,\mathrm{s}$. What is its velocity after this time?

3. The ride now maintains a constant velocity for 10 s. What is its acceleration during this time?

4. Finally, the ride comes to an abrupt a stop in 0.88 s. What is its acceleration?