

Name:

Date:

Period:

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## Motion #3

**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 m/s, it accelerates at a rate of  $-9.2 \text{ m/s}^2$  for 3.0 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?