

0 Question: A train is coasting around a large circular track. It is then switched to a smaller circular track. How does its speed change? Assume no friction.

A1: Who knows, not Thomas

A2: It slows down

Arguments for A1

2 Question: Was any new force applied to the train?

A1: No

A2: Yes

7 Question: If no force is applied, is motion is conserved?

A1: Yes

A2: Yes

13 Question: If motion is conserved, does speed change?

A1: No

A2: No

Arguments for A2

1 Question: Is energy conserved?

A1: Yes

A2: Yes

5 Question: If energy is conserved, does the train slow down?

A1: No

A2: Yes