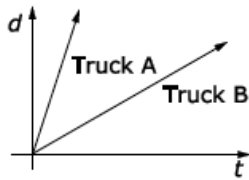


## Smarter Balanced Assessment Item Illustrating 7.RP.A.3

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Two trucks are traveling on a highway at a constant speed. The graphs of their distances,  $d$ , over time,  $t$ , are shown.



Which truck is traveling faster, and how do you know?

Truck [drop-down menu choices: A, B] is traveling faster because the graph is [drop-down menu choices: steeper, less steep, longer, shorter].

### Answer Key

A, steeper

### Elaboration on Alignment

While this item has some elements of an application problem such as the context of comparing the speeds of two vehicles, we classify this item as primarily one that targets conceptual understanding. Since there are no values given, students have to use what they understand about the unit rate as it relates to steepness of a line and they are never asked for a 'real-world' answer like 'who wins the race' or 'how much time has passed when the truck travels 25 miles.' Standard 7.RP.A.3 calls for both real world and mathematical problems, and this one leans a little more heavily toward the "mathematical" descriptor.

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