

Words and Graphs

NOTE: This Concept Builder consists of questions that pair two often-confused statements with one another and then ask students to identify the corresponding graph for each. Since there is a good deal of randomization in how the statements are selected, it is difficult to identify the actual questions that will appear on a student's screen. So rather than attempt to list the questions below, we've listed the statements and the graphics. Teachers are free to create their own "Paired Problems" from the provided statements and graphics.

Statement 1

A cart moves with a constant speed of 12 m/s for a time of 3.0 s.

A boat moves with a constant speed of 20.0 m/s for a time of 4.0 s.

A car moves with a constant speed of 18 m/s for a time of 6.0 s

Statement 2

A cart slows down from 12 m/s to a complete stop in a time of 3.0 s.

A boat slows down from 20.0 m/s to a complete stop in a time of 4.0 s.

A car slows down from 18 m/s to a complete stop in a time of 6.0 s.

Statement 3

Starting from rest, a cart speeds up to 12 m/s in a time of 3.0 s.

Starting from rest, a boat speeds up to 20.0 m/s in a time of 4.0 s.

Starting from rest, a car speeds up to 18 m/s in a time of 6.0 s.

Statement 4

Starting from rest, a cart speeds up at a rate of 12 m/s/s for 3.0 s.

Starting from rest, a boat speeds up at a rate of 20.0 m/s/s for 4.0 s .

Starting from rest, a car speeds up at a rate of 18 m/s/s for 6.0 s .

Statement 5

A cart moves with a constant speed, covering 12 m in a time of 3.0 s .

A boat moves with a constant speed, covering 20.0 m in a time of 4.0 s .

A car moves with a constant speed, covering 18 m in a time of 6.0 s .

Statement 6

Starting from rest, a cart speeds up, covering 12 m in a time of 3.0 s .

Starting from rest, a boat speeds up, covering 20.0 m in a time of 4.0 s .

Starting from rest, a car speeds up, covering 18 m in a time of 6.0 s .

Statement 7

A cart holds its position at 12 m for 3.0 s .

A boat holds its position at 20.0 m for 4.0 s .

A car holds its position at 18 m for 6.0 s .

Statement 8

A cart slows down at a rate of -12 m/s/s to a complete stop in a time of 3.0 s .

A boat slows down at a rate of -20.0 m/s/s to a complete stop in a time of 4.0 s .

A car slows down at a rate of -18.0 m/s/s to a complete stop in a time of 6.0 s .





