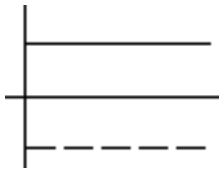
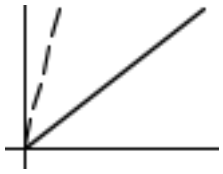
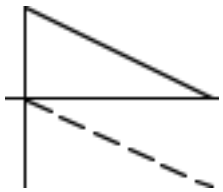
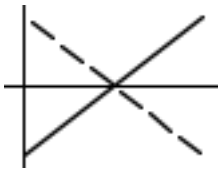
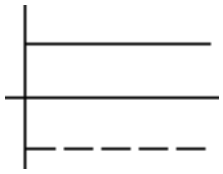
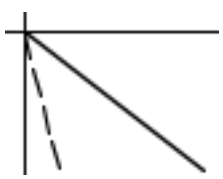
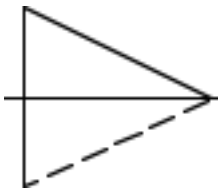
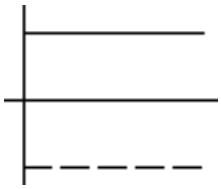
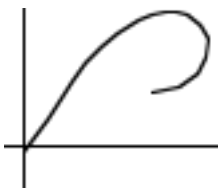
PhyzJob: What Do They Mean?

verbal interpretations of motion graphs

Felix

Complete the grid by answering questions A, B, and C for each motion graph.

	A. Describe the motion depicted by the **solid** line.	B. How—if at all—is the motion depicted by the dashed line **different?**	C. How—if at all—is the motion depicted by the dashed line **similar?**
1. *x vs. t* 	The body is at rest at some positive position.	The other body is at some negative position.	Both bodies are at rest.
2. *x vs. t* 	The body is moving in positive space in the positive direction.	The other body is moving faster.	Both bodies are moving in positive space in the positive direction.
3. *x vs. t* 	The body is moving in positive space in the negative direction.	The other body is moving in negative space.	Both bodies are moving in the negative direction.
4. *x vs. t* 	The body is moving from negative space to positive space in the positive direction.	The other body is moving from positive to negative space.	Both bodies are moving with the same speed?
5. *v vs. t* 	The body is moving at constant speed in the positive direction.	The other body is moving in the opposite direction.	The other body is moving with the same speed.
6. *v vs. t* 	The body is moving with increasing speed in the negative direction.	The other body's speed is changing more rapidly.	Both bodies are moving with increasing speed in the negative direction.

7. *v vs. t* 	The body is moving with decreasing speed in the positive direction.	The other body is moving in the negative direction.	Both bodies are moving with decreasing speed; they are both decelerating.
8. *a vs. t* 	i. Moving with increasing speed in the positive direction.	i. Decreasing speed in the positive direction.	i. Acceleration is constant.
	ii. Moving with decreasing speed in the negative direction.	ii. Increasing speed in the negative direction.	ii. Acceleration is constant.
9. *x vs. t* 	The body is moving with increasing speed in the positive direction.	The other body is moving with decreasing speed	Both bodies are moving in the positive direction
10. *x vs. t* 	The body is moving with increasing speed in the positive direction.	The other body is moving in the negative direction.	Both bodies are moving with increasing speed.
11. *x vs. t* 	The body starts at rest, speeds up, then slows down.	The body is moving fast, slows down, then speeds up.	Both bodies are moving in the positive direction
12. *x vs. t* 	Describe the motion depicted by the **solid** line. The motion shown is not possible since it requires traveling backward in time. It also requires infinite speed. at some point.		