Name

Date Pd

What does the graph say?

Given one of the graphs, determine the shape of the other graphs. Give an example of where you might see this scenario in the real world.

1. **2.** The initial position is 0m.

**position**

**position**

**time**

**time**

**+**

**+**

**velocity**

**velocity**

**time**

**time**

**-**

**-**

**+**

**+**

**acceleration**

**acceleration**

**time**

**time**

**-**

**-**

0 m

+

**vel:**

**acc:**

0 m

+

**vel:**

**acc:**

Give a real world example where this might occur:

Thalia slides her calculator to a friend, which slows to a stop.

Give a real world example where this might occur:

Florjan accelerates his car after the stoplight turned green.

1. 4. The initial position is at the far right of 0m.

**position**

**position**

**time**

**+**

**time**

**+**

**velocity**

**velocity**

**time**

**time**

**-**

**-**

**+**

**+**

**acceleration**

**acceleration**

**time**

**time**

**-**

**-**

0 m

+

**vel:**

**acc:**

0 m

+

**vel:**

**acc:**

Give a real world example where this might occur:

Edith is talking to a friend when someone else calls her over. She starts to walk back to them.

Give a real world example where this might occur:

Kashief is walking back home when he remembers he’s about to miss his favorite TV show. He starts to run.

1. The initial position is 0m. 6. The initial position is slightly above 0m.

**position**

**position**

**time**

**+**

**time**

**+**

The initial velocity is 0m/s.

**velocity**

**velocity**

**time**

**time**

**-**

**-**

**+**

**+**

**acceleration**

**acceleration**

**time**

**time**

**-**

**-**

0 m

+

**vel:**

**acc:**

0 m

+

**vel:**

**acc:**

Give a real world example where this might occur:

Lizzie tosses her pencil in the air and catches it.

Give a real world example where this might occur:

Ricardo runs until he reaches his max speed. He continues to run at that speed.

1. The initial position is far from 0m.8.

**position**

**position**

Give a real world example where this might occur:

Matt quickly accelerates to a sprint but tires out and soon comes to a stop.

**+**

**-**

**velocity**

**+**

**-**

**time**

**time**

**time**

**acceleration**

0 m

+

**vel:**

**acc:**

Give a real world example where this might occur:

Caitlyn is riding on the Tower of Terror. The ride drops suddenly, stops near the bottom, and brings her back up.

**+**

**-**

**velocity**

**+**

**-**

**time**

**time**

**time**

**acceleration**

0 m

+

**vel:**

**acc:**

The initial velocity is negative.

At the dashed line, the velocity is 0m/s.

Match each scenario with one of the problems.

1. Caitlyn is riding on the Tower of Terror. The ride drops suddenly, stops near the bottom, and brings her back up.
2. Edith is talking to a friend when someone else calls her over. She starts to walk back to them.
3. Kashief is walking back home when he remembers he’s about to miss his favorite TV show. He starts to run.
4. Ricardo runs until he reaches his max speed. He continues to run at that speed.
5. Thalia slides her calculator to a friend, which slows to a stop.
6. Matt quickly accelerates to a sprint but tires out and soon comes to a stop.
7. Florjan accelerates his car after the stoplight turned green.
8. Lizzie tosses her pencil in the air and catches it.