***Motion Map and Distance vs. Time Graph Practice Worksheet***

Sketch a motion map and distance vs. time graph corresponding to the following descriptions of motion.

|  |  |  |
| --- | --- | --- |
| Scenario | Motion Map | Distance vs. time graph |
| 1. The object is moving in the positive direction at a constant (steady) speed. |  |  |
| 2. The object is standing still. |  |  |
| 3. The object moves at a negative constant speed |  |  |
| 4. The object starts at 5m and moves at a negative constant speed for 8 seconds, stops for 4 seconds, and then moves at a constant positive speed for 4 seconds |  |  |
| 5. The object moves at a pos. constant speed stops for 6 seconds, stops for 2 seconds, then moves at a constant negative speed for 6 seconds |  |  |

Write the correct graph letter in the corresponding scenario box below.

|  |  |  |
| --- | --- | --- |
| a. | b. | c. |
| d. | e. |  |

|  |  |  |
| --- | --- | --- |
|  | **Scenario** | **Corresponding Graph** |
| 1. | Opposite Tom's home is a hill. Tom climbed slowly up the hill, walked across the top, and then ran quickly down the other side |  |
| 2. | Tom walked to the store at the end of his street, bought a newspaper, and then ran all the way back. |  |
| 3. | Tom ran from his home to the bus stop and waited. He realized that he had missed the bus so he walked home. |  |
| 4. | Tom walked slowly along the road, stopped to look at his watch, realized he was late, and then started running. |  |
| 5. | Make up your own story below! |  |