**Motion Graph Scenarios**

1. Sketch the distance-time graphs for the following scenarios:

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| 1. You start far away from the motion detector and decrease your distance from the motion detector at a steady rate.      1. You are sitting still 3 meters from the motion detector and don’t move. | 1. You start near the motion detector and walk away from it, first slowly and then faster.      1. You walk away from the motion detector and then turn around and walk toward it. |

1. Fill in the blanks:
2. If the motion graph is a straight line, then the walker’s speed must be \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
3. A steep line is caused by a person walking \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
4. A decreasing line is caused by a person walking \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
5. A horizontal line is caused by a person who \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
6. An increasing line is cause by a person walking \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.