**Average Acceleration**  Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

|  |  |
| --- | --- |
| time (s) | velocity (m/s) |
| 0 | **0** |
| 60. | **5** |
| 120. | **10.** |
|  |  |
| 240. | **30.** |
| 300. | **35** |
| 360. | **40.** |
| 420. | **60.** |
| 480. | **20.** |
| 540. | **50.** |
| 600. | **80.** |
| 660. | **75** |
| 720. | **60.** |
| 780. | **40.** |
| 840. | **10.** |

Calculate the average acceleration for each of the given time intervals. Show all work and write your answers with the appropriate significant figures.

1. 0 and 840. s
2. 0 and 60. s
3. 60. s and 540. s
4. 420. s and 480. s
5. 660. s and 840. s
6. 180. s and 480. s
7. 300. s and 780. s
8. 0 and 600. s
9. 540. s and 600. s
10. 660. s and 720. s
11. What do you notice about change in velocity when average acceleration is **positive**?
12. What do you notice about change in velocity when average acceleration is **negative**?
13. What do you notice about change in velocity when average acceleration is **0**?
14. Does an average acceleration of 0 necessarily mean that there was no change in velocity over a period of time?