5.3 Acceleration Worksheet

*Directions: Solve the following problems using the equation for acceleration we discussing in section 3*.

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| Problem # | Initial Velocity (m/s) | Final Velocity(m/s) | Time(sec) | Acceleration(m/s2) |
| 1. | 0  | 24 | 3 |  |
| 2. | 0 | 35 | 5 |  |
| 3. | 20 | 60 | 10 |  |
| 4. | 50 | 150 | 5 |  |
| 5. | 25 | 1200 | 2 |  |

***Remember: Velocity needs to be in meters/second before you plug it into the equation!!!***

6. A car accelerates from a standstill to 60km/hr in 10.0 seconds. What is its acceleration?

7. A car accelerates from 25 km/hr to 55 km/hr in 30 seconds. What is the acceleration?

8. A train is accelerating at a rate of 2.0 km/hr. If its initial velocity is 20 km/hr, what is its velocity after 30 seconds?

9. A runner achieves a velocity of 11.1 m/s 9seconds after he begins. What is his acceleration? What distance did he cover?