**Distance of an Accelerating Object**

**The distance that an accelerating object has traveled can be calculated by using:**

**D = (Vi x T) + (1/2 A x T2).**

**Example:**

**If a car accelerated from 25.6 m/s to 78.02 m/s in 11.25 s, how far did the car travel?**

**1st Solve for Acceleration ( A = Vf – Vi / t).**

**78.02 -25.6 / 11.25 = 4.66 m/s2**

**2nd Solve for Distance using the above equation.**

**D = (25.6 x 11.25) + (1/2 4.66 x 11.252)**

**D= 288 + 294.89 = 582.89 m**