Test Cases

1. Test Description: Checking to see if NMEA string data inputted is valid.   
   Input: $GPRMC,140854.909,A,5000.0746,N,02000.5396,W,173.8,280.6013,140910,003.1,W\*53  
   Result:
2. Test Description: Checking to see if program catches incorrect header.  
   Input: $GPRMQ,140854.909,A,5000.0746,N,02000.5396,W,173.8,280.6013,140910,003.1,W\*53  
   Result:
3. Test Description: Checking to see if NMEA string has correct UTC time   
   Input: $GPRMC,140854,A,5000.0746,N,02000.5396,W,173.8,280.6013,140910,003.1,W\*53  
   Result:
4. Test Description: Checking to see if NMEA string has correct data status  
   Input: $GPRMC,140854.909,C,5000.0746,N,02000.5396,W,173.8,280.6013,140910,003.1,W\*53

Result:

1. Test Description: Checking to see if NMEA string has correct latitude  
   Input: $GPRMC,140854,A,abc ,N,02000.5396,W,173.8,280.6013,140910,003.1,W\*53  
   Result:
2. Test Description: Checking to see if NMEA string has N or S  
   Input: $GPRMC,140854,A,5000.0746,B,02000.5396,W,173.8,280.6013,140910,003.1,W\*53  
   Result:
3. Test Description: Checking to see if NMEA string has correct longitude  
   Input: $GPRMC,140854,A,5000.0746,N,abc,W,173.8,280.6013,140910,003.1,W\*53  
   Result:
4. Test Description: Checking to see if NMEA string has E or W  
   Input: $GPRMC,140854,A,5000.0746,N,02000.5396,N,173.8,280.6013,140910,003.1,W\*53  
   Result:
5. Test Description: Checking to see if NMEA string has correct speed.   
   Input: $GPRMC,140854.909,A,5000.0746,N,02000.5396,W,speed,280.6013,140910,003.1,W\*53  
   Result:
6. Test Description: Checking to see if NMEA string has correct track.   
   Input: $GPRMC,140854.909,A,5000.0746,N,02000.5396,W,173.8,track,140910,003.1,W\*53  
   Result:
7. Test Description: Checksum is incorrect testing to see if program catches invalid checksum   
   Input: $GPRMC,140854.909,A,5000.0746,N,02000.5396,W,173.8,280.6013,140910,003.1,W\*76  
   Result:
8. Test Description: Checking to see if NMEA string starts correctly.   
   Input: GPGGA,140854.909,5000.0746,N,02000.5396,W,1,03,0.9,0,M,0,M,,\*73   
   Result:
9. Test Description: Checking to see if NMEA string starts correctly.   
   Input: $GPGGA,140854.909,5000.0746,N,02000.5396,W,1,03,0.9,0,M,0,M,,\*73

Result: