

## GPS Questions for FFA Contest

### White Track

- 1) The following navigation system was invented by Alfred Lee Loomis and used extensively by the US Navy during WWII.
  - a) Celestial
  - b) LORAN
  - c) OMEGA
  - d) Satellite GPS
  
- 2) True or False: Landmarks (e.g., Big oak tree on side of road) is also a type of positioning system?
  - a) True
  - b) False
  
- 3) Which of the following coordinates are in the degrees-minutes-seconds position format?
  - a)  $32^{\circ} 00' 00.0$   $098^{\circ} 00' 00.0$
  - b)  $32' 00'' 00.0^{\circ}$   $098' 00'' 00.0^{\circ}$
  - c)  $32^{\circ} 00' 00.0''$   $098^{\circ} 00' 00.0''$
  - d)  $32^{\circ} 00'' 00.0''$   $098^{\circ} 00'' 00.0''$
  
- 4) Approximately \_\_\_\_ satellites make up the current GPS constellation.
  - a) 3
  - b) 4
  - c) 6
  - d) 24
  
- 5) GPS satellites have a planned lifespan of approximately \_\_\_\_ years.
  - a) 5.5
  - b) 7.5
  - c) 9.5
  - d) 15

- 6) To maintain orbital accuracy, GPS satellites are continuously monitored by \_\_\_\_\_
- a) Ground Stations
  - b) LORAN Systems
  - c) Omega Systems
  - d) Department of Defense Maritime Buoys
- 7) Which of the following describes interference from too many reflected or bounced signals received by the GPS receiver?
- a) Ephemeris
  - b) Multipath
  - c) Ionosphere
  - d) Troposphere
- 8) Which of the following is a fundamental part of the GPS triangulation process?
- a) Vertical Ascension Theory
  - b) Datum Errors
  - c) Lunar Drift
  - d) Pseudo Random Code
- 9) The WGS 84 map datum is best described as which of the following?
- a) a local grid
  - b) a regional grid
  - c) a global grid
  - d) a North American grid
- 10) Which of the following describes the process of determining satellite distance from the receiver?
- a) Vertical Ascension Theory
  - b) Ranging
  - c) Differential Equitation
  - d) Ephemerical Processing