

BUSI 443: REAL PROPERTY ASSESSMENT

Answer Guide No. 9

CHAPTER 9: Geographic Information Systems and Real Property Assessment

Marks: 1 mark per question.

1. Answer: 1
Signals from a minimum of THREE positioning satellites are required for a GPS receiver to establish its position.
2. Answer: 4
An enterprise solution looks beyond the assessment office to a government-wide approach linking systems together including assessment and non-assessment applications.
3. Answer: 3
Tilt displacement occurs when the aircraft is not flying on a perfectly level path, and the lens is not aiming straight downward at the time of exposure.
4. Answer: 2
The automated mapping/facilities management (AM/FM) system features sophisticated database capable of storing and manipulating related attribute information. It is limited in its ability to analyze relationships between different mapping layers other than through visual inspection of the overlaid layers.
5. Answer: 4
The “metes and bounds” system describes the property using lines which are identified by length and compass bearing. Options (1) and (3) are incorrect because these statements do not begin from a reference point that is not on the actual property. Option (2) is incorrect because it does not specify a single direction in which to proceed, and it does not identify an exact starting point — where exactly in this intersection do you start from?

For student’s reference, the property illustrated would be surveyed as follows. Starting from the reference point (brass disc):
 - move 22 feet 45° to the east (N 45° E), to the south-west corner of the property;
 - move 80 feet due north to the north-west corner of the property;
 - move 126.2 feet due east (N 90° E) to the north-east corner of the property;
 - move 92.4 feet 60° to the south-west (S 30° W) to the south-east corner of the property;
 - move 80 feet due west (N 90° W) to the south-west corner of the property, to close or “bound” the property.
6. Answer: 4
The “lot and block” method is a simple way of referencing lots once they have been surveyed using the “metes and bounds” method. Information from the “metes and bounds” method is compiled and recorded onto a map, so there is no need to use compass bearings and distance measurements when referring to a plot of land.

7. Answer: 3
The application engine performs all of the complex calculations and tasks that allow the user interface to function. The user interface is designed with the end-user in mind; its main goal is to provide GIS specialists with access to GIS-based data while hiding the complex, behind-the-scenes query calculations of the application engine that makes the GIS operate.
8. Answer: 1
The “metes and bounds” system is the earliest form of land description which describes the property by referencing the physical features by which the property is “bound”.
9. Answer: 1
Option (1) is the correct answer. In the geographic coordinate (geocode) system, parcels are identified by their coordinates, so it is not possible to identify a split from the geocode. If two parcels are created from one larger parcel, the two “new” parcels simply take on the new geographic coordinates. Consolidations use the coordinates of the newly combined parcel which may or may not be the same geocode as one of the older parcels.
10. Answer: 2
Relief Displacement describes a problem in aerial photography where the photo image is distorted because the ground is not perfectly level. Objects closer to the camera appear larger; objects further away appear smaller. Objects are also distorted with respect to the point directly below the camera. Option (1) is incorrect because objects above the point directly below the camera are displaced outward. Option (2) is correct.
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- 10 Total Marks