

Unit 11 Test
Land Measurement and Descriptions

Name _____ Date _____ Hour _____

Multiple Choice

Choose the answer that best completes each statement or question.

- ___ 1. When streams or rivers form boundaries, it is often difficult to calculate area. To determine the area of land, what shape is used?
- A. triangle
 - B. trapezoid
 - C. square
 - D. rectangle
- ___ 2. What method uses a map overlay and a scaled grid to find the area of land?
- A. simple figures
 - B. digitizer
 - C. GPS coordinates
 - D. coordinate squares
- ___ 3. How many feet are in one mile?
- A. 320
 - B. 1,760
 - C. 5,280
 - D. 9,243
- ___ 4. How many squared feet are in 3 acres?
- A. 600
 - B. 14,520
 - C. 130,680
 - D. 392,040
- ___ 5. If you own one hectare of land, how much land in acres do you own?
- A. 2.471
 - B. 4.086
 - C. 10.239
 - D. 20.482

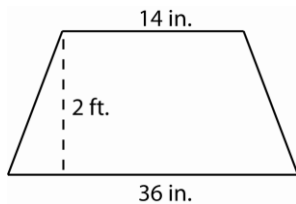
___ 6. Length x width is the formula for the area of a ___.

- A. rectangle
- B. trapezoid
- C. circle
- D. triangle

___ 7. A piece of land is in the shape of a square and has a length of 90 feet. What is the area of the land?

- A. 45 ft.²
- B. 180 ft.²
- C. 8,100 ft.²
- D. 9,000 ft.²

___ 8. Find the area in squared feet for the shape below.



- A. 0.04 ft.²
- B. 25 ft.²
- C. 50 ft.²
- D. 100 ft.²

___ 9. In order to calculate area, what has to be the same?

- A. height and length
- B. width and diameter
- C. the units of measurement
- D. all of the above

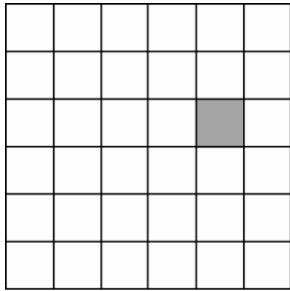
___ 10. How many principle meridians are there in the U.S.?

- A. 19
- B. 34
- C. 50
- D. 100

___ 11. Principle meridians and base lines cross at the ___.

- A. center point
- B. apex point
- C. turning point
- D. initial point

___ 12. Which section number is shaded in gray?



- A. 10
- B. 14
- C. 17
- D. 27

___ 13. How many acres are in one section of land?

- A. 40
- B. 180
- C. 260
- D. 640

___ 14. What does GPS stand for?

- A. Geospatial Program Satellites
- B. Global Positioning System
- C. Global Program Satellites
- D. Geospatial Positioning System

___ 15. Which is **not** needed to determine the distance of a satellite from the earth?

- A. angle
- B. distance
- C. time
- D. speed

___ 16. After GPS data is gathered, what typed of software collects and stores it usable for us?

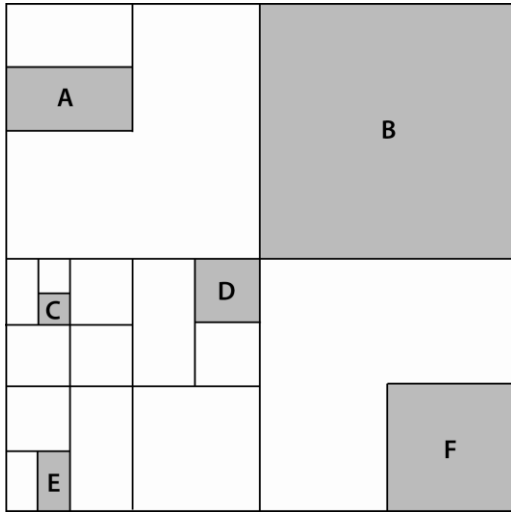
- A. Microsoft software
- B. GIS software
- C. Signal software
- D. GRW software

___ 17. What does precision agriculture provide for farmers?

- A. crop monitoring
- B. yield data
- C. pesticide application information
- D. all of the above

Matching

Match each land description with its correctly shaded area.



- ___ 18. NE $\frac{1}{4}$, NE $\frac{1}{4}$, SW $\frac{1}{4}$
- ___ 19. NE $\frac{1}{4}$
- ___ 20. SE $\frac{1}{4}$, NW $\frac{1}{4}$, NW $\frac{1}{4}$, SW $\frac{1}{4}$
- ___ 21. SE $\frac{1}{4}$, SE $\frac{1}{4}$
- ___ 22. E $\frac{1}{2}$, SW $\frac{1}{4}$, SW $\frac{1}{4}$, SW $\frac{1}{4}$
- ___ 23. S $\frac{1}{2}$, NW $\frac{1}{4}$, NW $\frac{1}{4}$

True or False

Indicate if each statement is true or false.

- ___ 24. Pacing is the only method to finding horizontal distance.
- ___ 25. One acre is equal to a square chain.
- ___ 26. Land area can only be calculated on square or rectangular plots.
- ___ 27. A legal land description is used to locate property boundaries.
- ___ 28. A quadrangle is 4 miles square.
- ___ 29. Signal from at least two satellites must be obtained to determine locations on the earth.
- ___ 30. Satellite signals are obtained through GIS and used by GPS software to create maps.

