

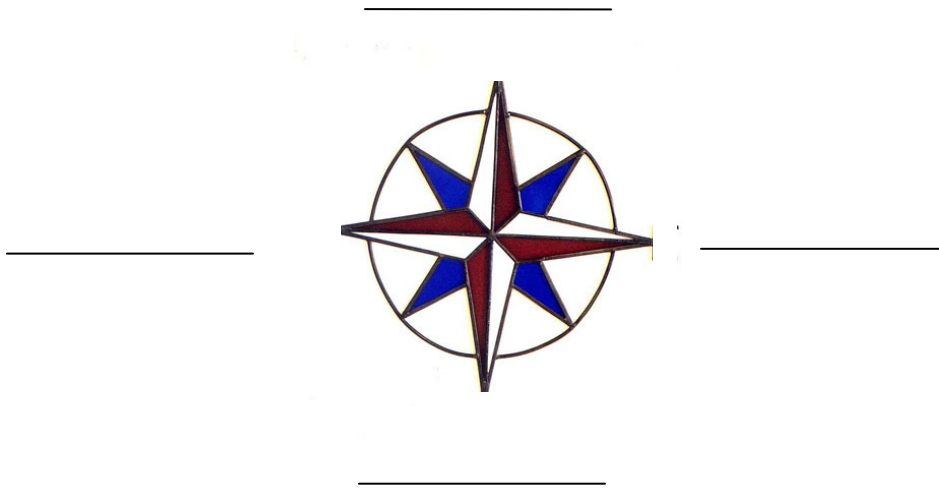


The Sport of Orienteering

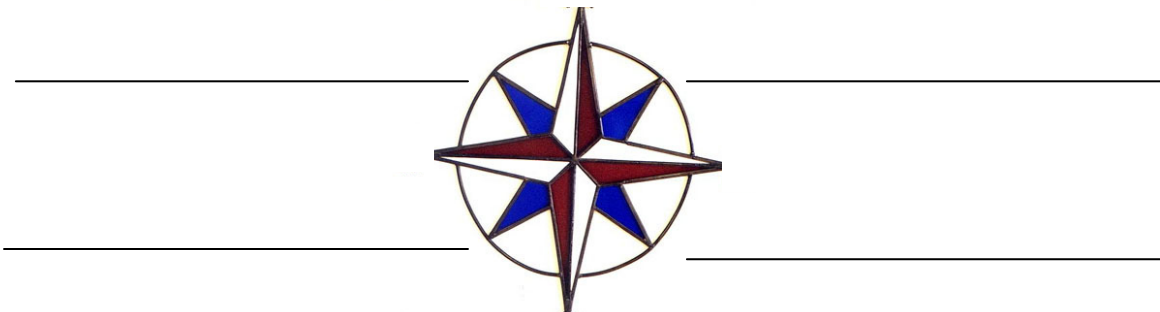
Name: _____

Answer the questions below.

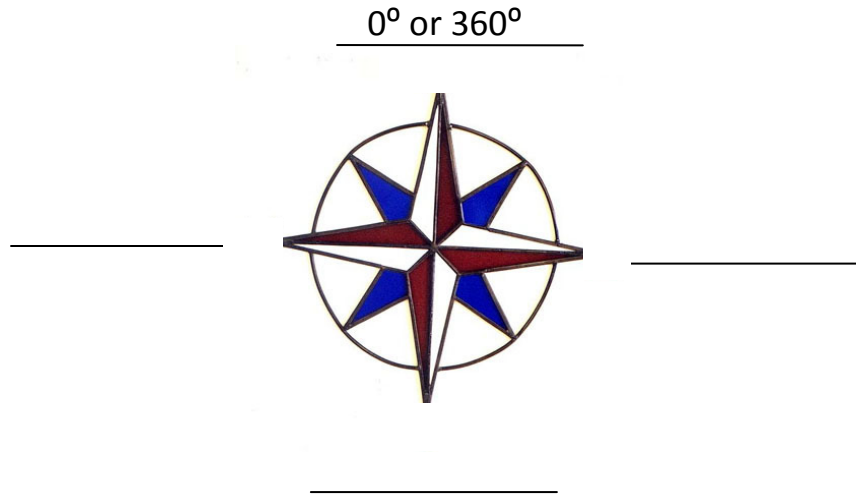
1. Identify the four cardinal points found on a compass:



2. Identify the intercardinal points found on a compass:



3. Label the number of degrees of rotation each primary direction on the compass represents. The first one has been given for you.



Solve the problems below using the attached map. Show your work in the space provided.

4. If the length of school building A is 64 feet and the width is 40 feet, what is the area of the building?

Area= _____

5. Refer to question #1. If the width of school building B is $\frac{1}{4}$ the width of school building A what is the area of school building B?

Area= _____

6. Parking Lot B is what kind of polygon? _____

7. If the north side of Parking Lot B measures 500 ft. and the east side measures 200 ft. Then the south side would measure _____ ft. and the west side would measure _____ ft.

8. To find the area of parking lot B, what mathematical formula would you use?

9. Find the area of parking lot B if the length of the base is 55 feet, the width is 20 feet, and the height is 12 feet.

Area= _____

10. School building C is what kind of triangle? (circle the correct answer)

isosceles

right

scalene

equilateral

11. To find the area of school building C, what mathematical formula would you use?

12. Find the area of school building C if the base is 10 feet and the height is 24 feet.

Area= _____

13. Find the perimeter of the school grounds in **feet** using these measurements: Side A is 400 yards, Side B is 520 yards, and Side C is 400 yards.

14. The perimeter of the school grounds forms what kind of triangle?

15. Two of the interior angles of the triangle named in problem ten are: 45° and 90° . Find the measure of the unknown angle.

16. The properties of a parallelogram include:

- A. Opposite angles are equal and opposite sides are equal.
- B. All angles are equal, but sides can vary in length.
- C. All of the above.
- D. None of the above.

17. School building D is a parallelogram. Two of the interior angles are 80° and 100° . What are the measures of the two remaining angles.

_____ $^\circ$ and _____ $^\circ$

18. Three of the four interior angles of the campus building are: 40° , 40° , and 140° . Identify the unknown angle.

Solve the problems below using the attached map.

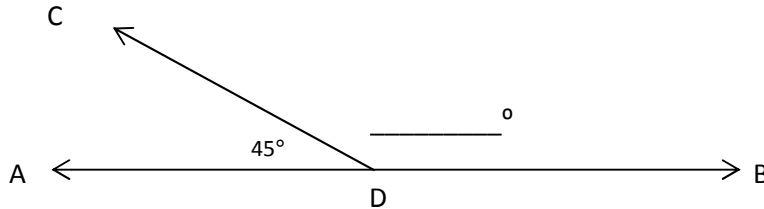
19. Imagine that you are standing in the garden facing north. If you were to turn 180° what direction would you be facing?

- A. East
- B. West
- C. South
- D. Southwest

20. You are standing on the playground in the direction of 90° of north. What direction are you facing?

- A. West
- B. South
- C. East
- D. Northeast

21. Angles ADC and CDB are called supplementary angles because together, they create a straight line. Use the diagram below to find the measure of angle CDB and label it.



Match the word with its definition by writing the correct word in the blank in front of each sentence. Each word will only be used once.

Vocabulary Words:

Degrees

Compass

True North

Orienteering

Compass Rose

Magnetic North

1. _____ Geographic north or toward the North Pole.
2. _____ Defines the amount of rotation away from the magnetic north. A compass is divided into 360 of these.
3. _____ An instrument that uses the earth's magnetic field to point to the direction of the magnetic north pole.
4. _____ A figure on a map displaying the orientation of the cardinal direction.
5. _____ The direction the needle of the compass points to. This direction is based on the magnetic fields of the earth and is not the same as true north.
6. _____ Using a map and compass to navigate your between checkpoints along an unfamiliar course.