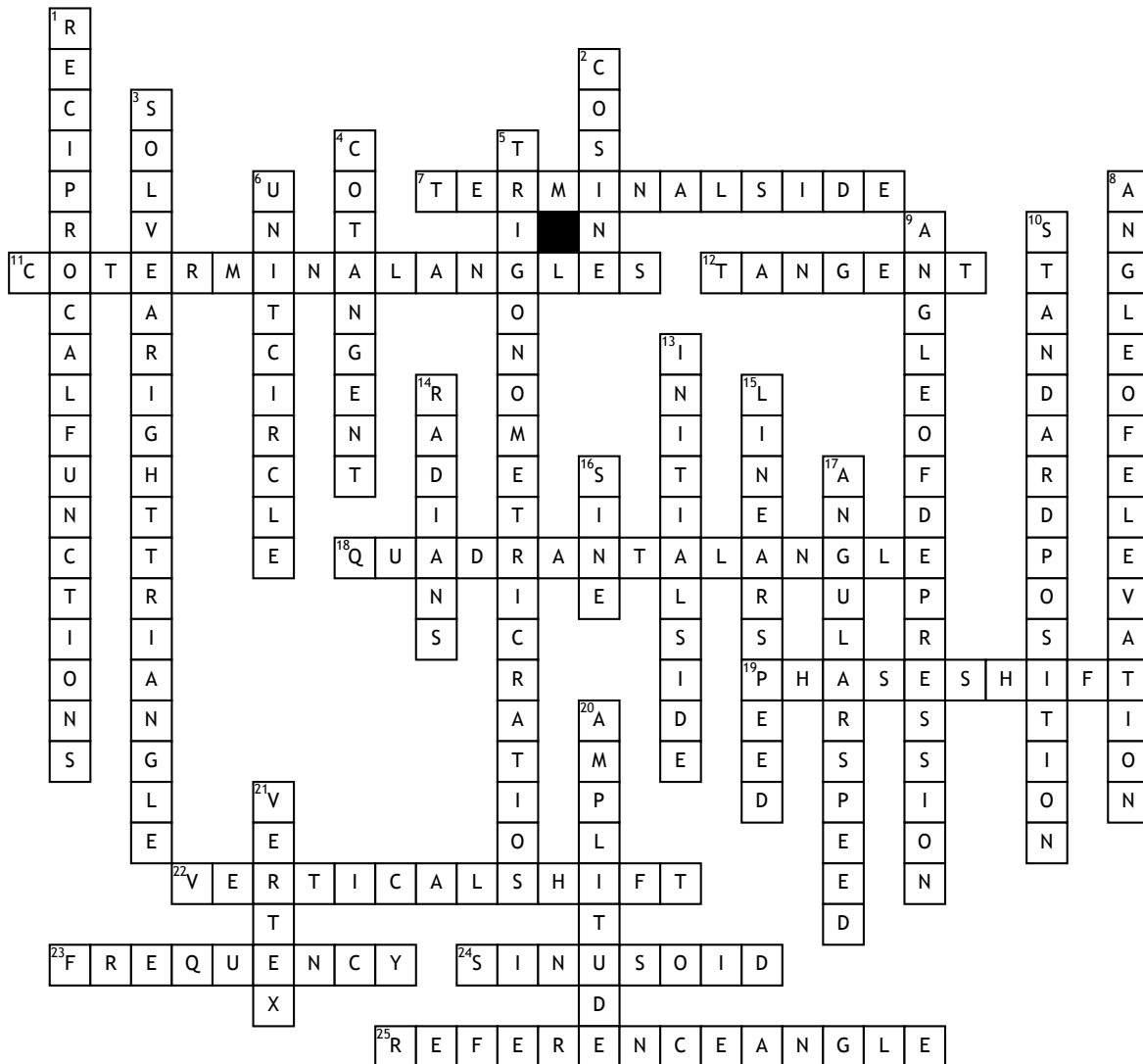


Name: \_\_\_\_\_

Date: \_\_\_\_\_

# Pre-Cal Chapter 4 Vocabulary



## Across

7. the final position of a ray after rotation when forming an angle (2 wds.)

11. angles in standard position that have the same initial and terminal sides but different measures (2 wds.)

12. opposite over adjacent

18. an angle in standard position that has a terminal side that lies on one of the coordinate axis (2 wds.)

19. the difference between the horizontal position of a function and that of an otherwise similar sinusoidal function (2 wds.)

22. A vertical translation that is the average of the maximum and minimum values of the function (2 wds.)

23. the number of cycles the function completes in one unit intervals

24. any transformation of a sine function

25. the acute angle formed by the terminal side of an angle in standard position and the x-axis (2 wds.)

## Down

1. trigonometric functions that are reciprocals of each other (2 wds.)

2. adjacent over hypotenuse

3. to find the measures of all the sides and angles of a triangle (4 wds.)

4. adjacent over opposite

5. ratios that are formed using the side measures of a right triangle and a reference angle (2 wds.)

6. a circle with radius one centered at the origin of a coordinate system (2 wds.)

8. the angle formed by a horizontal line and an observer's line of sight to an object above (3 wds.)

9. the angle formed by a horizontal line and an observer's line of sight to an object below (3 wds.)

10. In the coordinate plane, an angle positioned so that its vertex is at the origin and its initial side is along the positive x-axis (2 wds.)

13. the starting position of a ray when forming an angle (2 wds.)

14. a unit of angular measurement equal to  $180/\pi$

15. the rate at which an object moves along a circular path (2 wds.)

16. opposite over hypotenuse

17. the rate at which the object rotates about a fixed point (2 wds.)

20. half the distance between the maximum and minimum values of a sinusoidal function

21. the common endpoint of two or more noncollinear rays