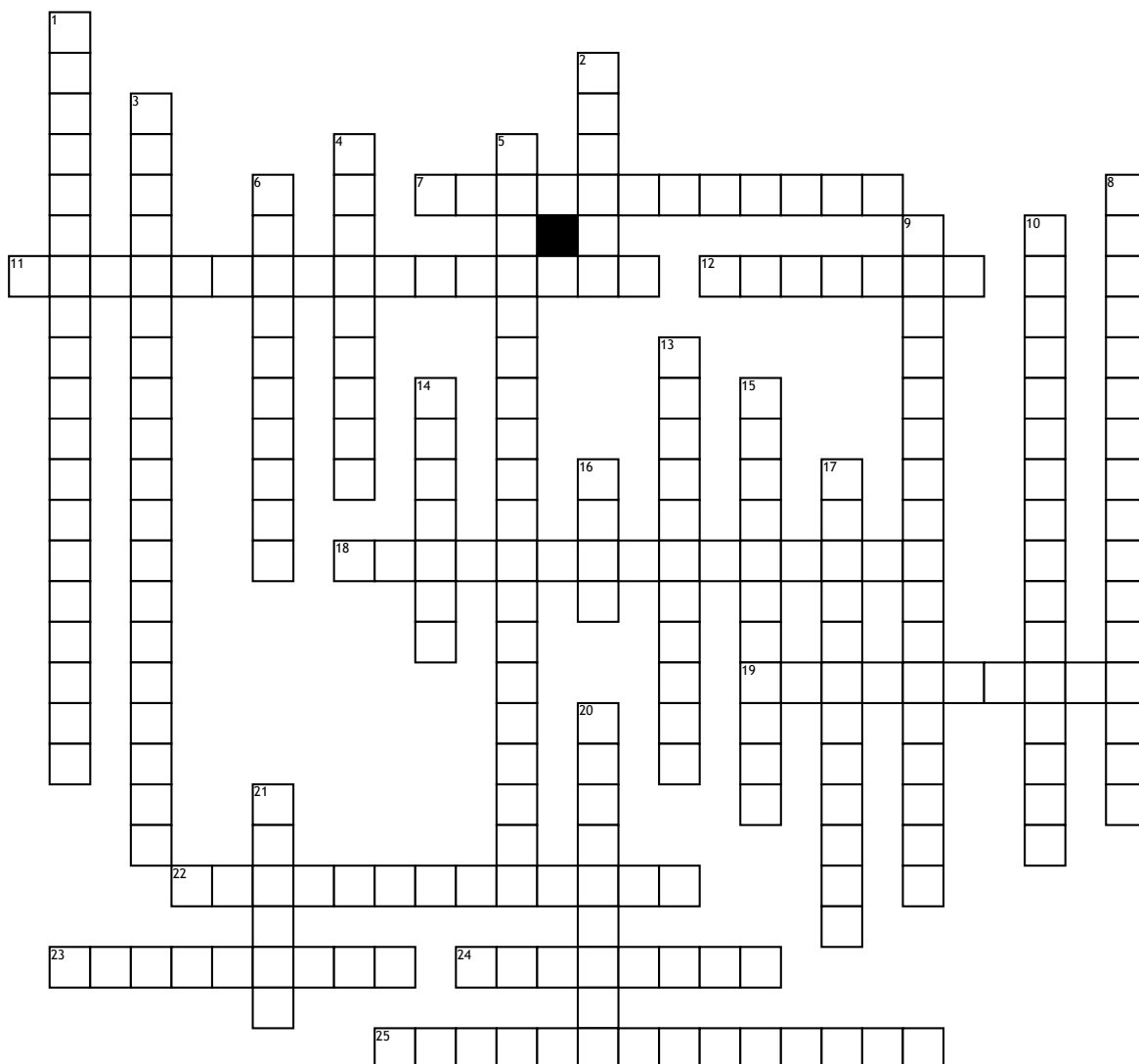# Pre-Cal Chapter 4 Vocabulary

**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 (2wds.)

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

**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 (2wds.)

**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 (2wds.)

**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