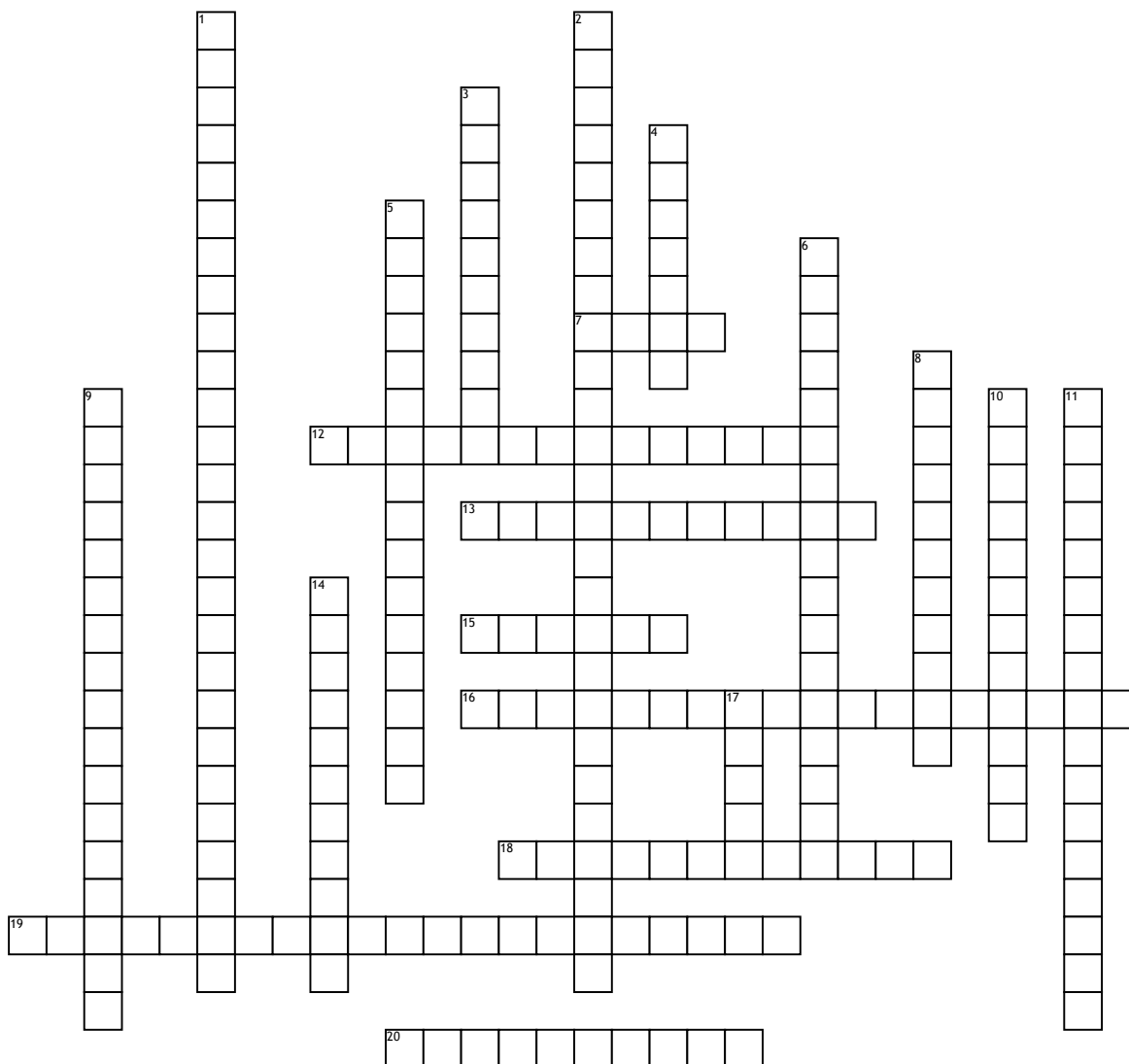


# Digital Crossword Puzzle



## Across

7. The trigonometric function that is equal to the ratio of the side opposite a given angle (in a right triangle) to the hypotenuse.

12. Angle used to evaluate the trigonometric functions.

13. Side of the triangle directly next to (adjacent) the indicated angle aside from the hypotenuse.

15. The trigonometric function that is equal to the ratio of the side adjacent to an acute angle (in a right triangle) to the hypotenuse.

16. A theorem attributed to Pythagoras that the square of the hypotenuse of a right triangle is equal to the sum of the squares of the other two sides.

18. The branch of mathematics dealing with the relations of the sides and angles of triangles and with the relevant functions of any angles.

19. A function of an angle, or of an abstract quantity, used in trigonometry, including the sine, cosine, tangent, cotangent, secant, and cosecant, and their hyperbolic counterparts. Also called circular function.

20. The longest side of a right triangle, opposite the right angle.

## Down

1. Right triangle in which the two legs are equal to  $x$  and the hypotenuse is equal to  $x$  square root of 2.

2. Right triangle in which the side length opposite the 30 degree angle is equal to  $x$ , the hypotenuse is equal to  $2x$ , and the side length opposite the 60 degree angle is equal to  $x$  square root of 3.

3. An instrument used for measuring the angle or elevation of slopes.

4. The trigonometric function that is equal to the ratio of the sides (other than the hypotenuse) opposite and adjacent to an angle in a right triangle.

5. The angle between the horizontal and the line of sight to an object above the horizontal.

6. A triangle having two sides of equal length.

8. A straight line along which an observer has unobstructed vision.

9. The angle formed by the line of sight and the horizontal plane for an object below the horizontal.

10. Corresponding in size or amount to something else

11. A set of 3 whole numbers that satisfy the Pythagorean theorem.

14. Side of the triangle directly across from the indicated angle.

17. The quantitative relation between two amounts showing the number of times one value contains or is contained within the other.