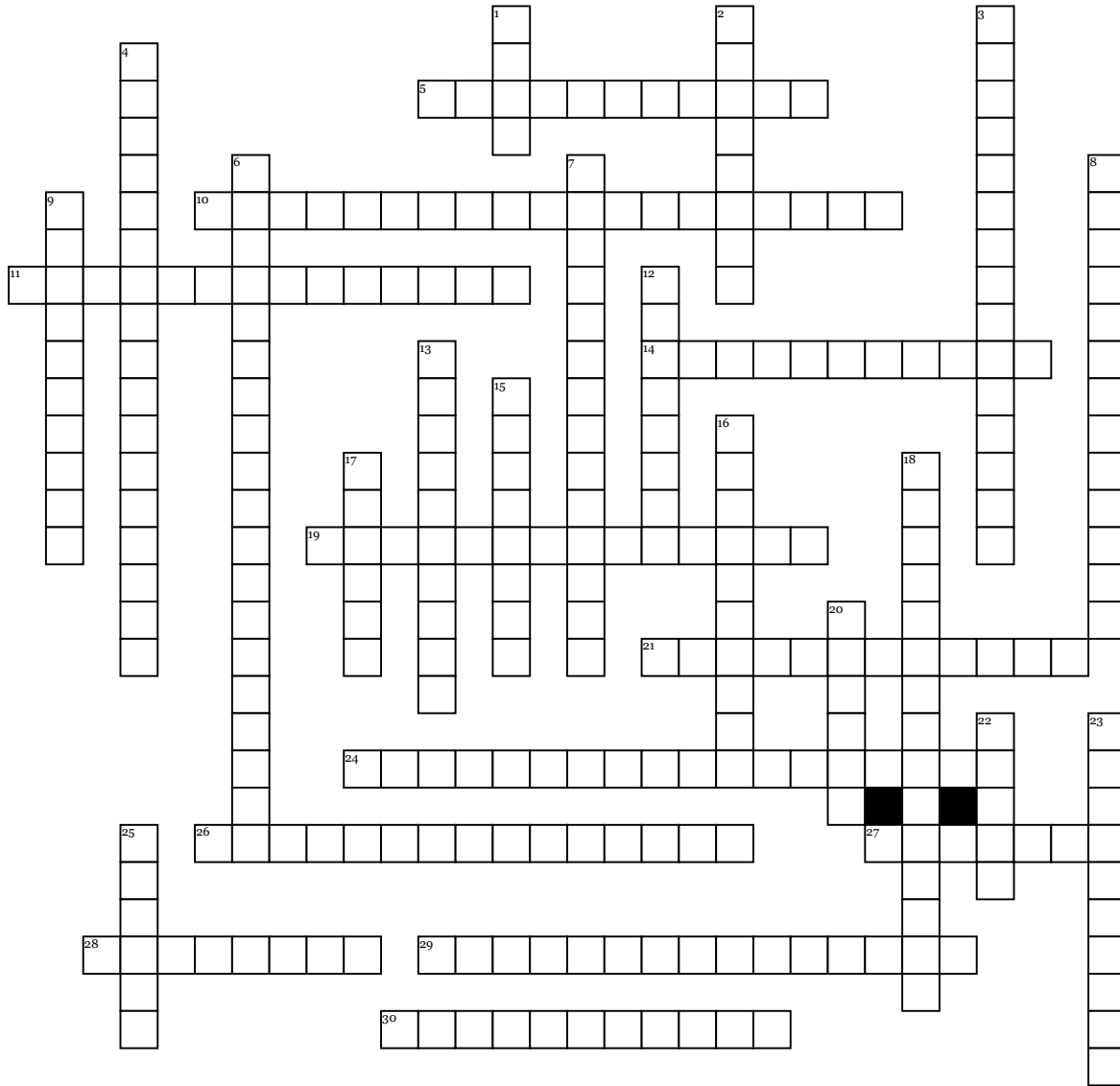


# Geometry Word Search



## Across

**5.** A measurable part of a line that consists of two endpoints. It also contains all of the points between them.

**10.** A three-sided regular polygon. It has equal angles.

**11.** A ray that divides an angle. It also splits the angle into two equal parts.

**14.** To move something from left to right or up and down. This is a rigid motion.

**19.** Two angles that lie in the same plane and have a common vertex. They also have a common side, but no common interior points.

**21.** An angle whose measure is greater than 90 degrees. It has to also be less than 180 degrees.

**24.** A theorem that the square of the hypotenuse of a right triangle is equal to the sum of the squares of the other two sides.  $a^2 + b^2 = c^2$

**26.** Any segment, line, or plane that intersects a segment at its midpoint. This means it leaves two equal parts on either side of this point.

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

**28.** A \_\_\_\_\_ is a transformation that produces an image that is the same shape as the original, but is a different size. A \_\_\_\_\_ stretches or shrinks the original figure.

**29.** The formula  $\{\text{the square root of } (x_2-x_1)^2 + (y_2-y_1)^2\}$  is the distance between points  $(x_1, y_1)$  and  $(x_2, y_2)$ .

**30.** Any way of moving all the points in the plane such that: a) the relative distance between points stays the same and b) the relative position of the points stays the same.

## Down

**1.** Ratio of the length of the side opposite the given angle then set to the length of the hypotenuse. It is of a right-angled triangle.

**2.** The original figure of a shape before being transformed.

**3.** In geometry, the formula is often used to find the bisector of a line.  $(x_1+x_2 / 2, y_1+y_2 / 2)$

**4.** Has two equal sides. Has two equal angles.

**6.** A three-sided regular polygon. It has equal sides.

**7.** A \_\_\_\_\_ is a general term for four specific ways to manipulate the shape of a point, a line, or shape. The original shape of the object is called the pre-image and the final shape and position of the object is the image under the \_\_\_\_\_.

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

**9.** A pair of adjacent angles with noncommon sides. They are opposite rays.

**12.** Any \_\_\_\_\_ is a motion of a certain space that preserves at least one point. It can describe, for example, the motion of a rigid body around a fixed point.

**13.** An angle whose measure is 90 degrees. It cannot be anything other than 90 degrees.

**15.** Any straight line segment that passes through the center of the circle and whose endpoints lie on the circle. It can also be defined as the longest chord of the circle.

**16.** A transformation in which a geometric figure is \_\_\_\_\_ across a line, creating a mirror image. That line is called the axis of \_\_\_\_\_ . This is a rigid motion.

**17.** In classical geometry, a \_\_\_\_\_ of a circle or sphere is any of the line segments from its center to its perimeter, and in more modern usage, it is also their length. In either case, the \_\_\_\_\_ may be more than half the diameter, which is usually defined as the maximum distance between any two points of the figure.

**18.** A triangle with no equal sides. It also has no equal angles.

**20.** The intersection point of two sides of a plane figure. A point where a figure begins or meets.

**22.** The subset of a function's codomain which is the output of the function from a subset of its domain.

**23.** An angle whose measure is less than 90 degrees. Also it is more than 0 degrees.

**25.** Ratio of the adjacent side. This is set to the hypotenuse of a right-angled triangle