## You Better GeomeTRY This Puzzle!



## Across

4. A transformation in which a geometric figure is reflected across a line, creating a mirror image
5. A line segment joining the midpoints of two sides of a triangle
6. If $a=b$ and $b=c$, then $a=c$
7. A quadrilateral with four congruent sides and four congruent right angles
8. A line with a single endpoint
9. The ratio of any two corresponding lengths in two similar geometric figures 20. A side of a right triangle that is opposite the 90 -degree angle
10. A statement where two ratios are congruent
11. A proof in which arrows show the logical connections between the statements
12. A quadrilateral with two pairs of adjacent sides that are congruent

## Down

1. An angle in a circle with vertex on the circle itself
2. A measurement of a figure taken as perpendicular to its base
3. A line segment on the interior of a circle with both endpoints on the circle 5. Switching the hypothesis and conclusion of a conditional statement 6. A line segment between two points on the circle or sphere which passes through the center
4. Negating both the hypothesis and the conclusion of a conditonal statement
5. An angle in a circle with vertex at the circle's center
6. The trigonometric ratio pertaining to right triangles of adjacent over hypotenuse 12. A transformation in which a plane figure turns around a fixed center point 13. The trigonometric ratio pertaining to right triangles of opposite over adjacent 15. A closed plane figure for which all sides are line segments
7. A special case of a more general theorem which is worth noting separately 19. A pattern that you can cut and fold to make a model of a solid shape
8. The measurement of the amount of space in a solid figure
