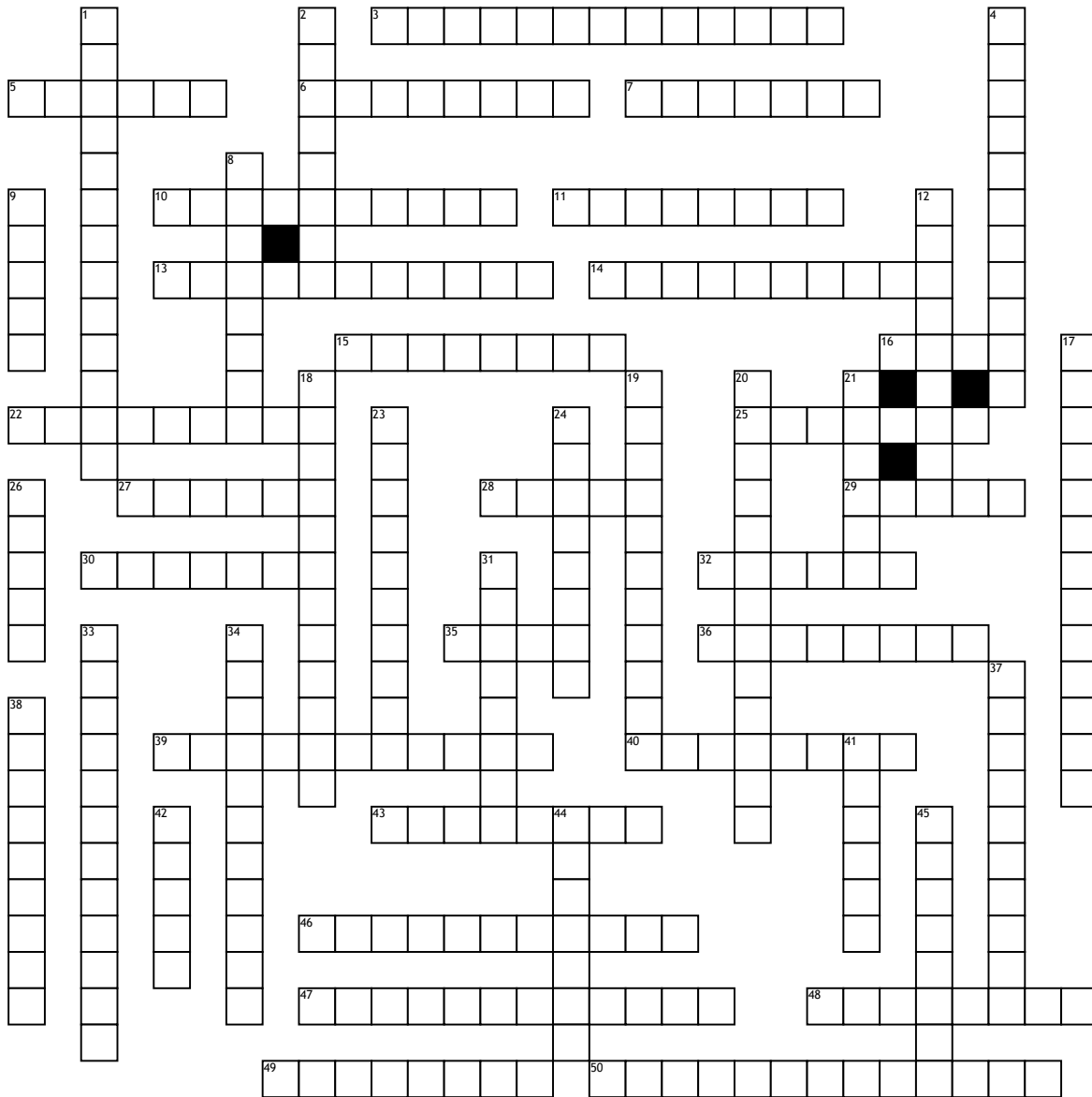


# 7th GRADE PRE-ALGEBRA PUZZLE



## Across

3. The three parts of a circle are the area, radius, and the \_\_\_\_\_.
5. The set of all points in a plane that are the same distance,  $r$ , from a given point in the plane knows as the center.
6. This angle measures exactly  $180^\circ$ .
7. A many-sided closed figure formed from three or more segments, such that each segment intersects exactly two other segments at each endpoint.
10. Triangle \_\_\_\_\_ Theorem is the sum of the lengths of any two sides of a triangle is greater than the length of the third side.
11. It is a property that can exist as a multitude or magnitude.
13. The number that the sides lengths of one figure can be multiplied by to give the corresponding side lengths of the other figure.
14. The percentage of the sale price of an item or a percentage of the item's mark-up.
15. Lines in a plane that never meet.
16. The number of square units that a figure covers.
22. Tables and Graphs can be used to determine if a pattern of numbers is linear or \_\_\_\_\_.
25. Points on a graph are referred to as coordinates and are given as an \_\_\_\_\_ pair.
27. The difference between the buying price (cost to the business) and the selling price (cost to the customer).
28. A flat surface that extends forever in all directions.
29. A comparison of two quantities (numbers).
30. When two shapes are not the same but they are alike. They are the same shape but different size.
32. This angle has a measure that is greater than  $180^\circ$ .

35. A special ratio that compares two different quantities measured by different units. This can be used to build a table.
36. These angles are the opposite angles formed by two intersecting lines.
39. This counting principle states that if there are  $(m)$  ways that one event can occur and  $(n)$  ways that another event can occur, then there are  $(m \cdot n)$  ways that both events can occur.
40. This shape has three sides, three angles, and 6 parts total.
43. When you tell the name of the shape using \_\_\_\_\_ they are giving you the correspondence.
46. The complete set of all of the possible outcomes of that event. This can be organized as a list, a table, or a chart.
47. This probability is approximated by performing trials and recording the ratio of the number of occurrences of the event to the number of trials performed. These are the actual results of the experiment.
48. These angles are two angles that are next to each other. They share a common ray and endpoint and do not overlap.
49. An important trait of a physical triangle that describes how the sides of a triangle do not change or break loose.
50. These angles are two angles whose measures have a sum of  $180^\circ$ . This is also what two angles are called if they form a linear pair.

## Down

1. A pair of sides that are aligned or match-up. These sides are compared when determining the scale factor.
2. This is the value of a number that is the distance the number is from zero on the number line.
4. This probability is the likelihood or chance of an event occurring. The expected probability before doing anything.
8. With integers, when multiplying and dividing numbers with different signs the answer is always this.
9. A three-dimensional shape with a top and a base that are congruent polygons, and lateral (side) faces that are parallelograms.
12. When two shapes are exactly the same, same angles measure and same length of sides. This is how you check for the same shape with similar figures.
17. A polygon with four sides.
18. A relationship where there is a constant change between two quantities. This relationship is shown with a graph that is a straight line that goes through the origin.
19. The  $x$  axis is the horizontal line used for the \_\_\_\_\_ or "stand-alone" variable. The  $y$  axis is the dependent variable.
20. These angles are two angles whose measures have a sum of  $90^\circ$ .
21. The most common units for angle measure.
23. This plane is created when we place two number lines together so that one is vertical and one is horizontal.
24. The sum of the \_\_\_\_\_ of a triangle are  $180^\circ$ . This is the Triangle Sum Theorem.
26. This is what units of volume should be.
31. The coordinates  $(-x, y)$  are located in \_\_\_\_\_ two.
33. This relationship occurs when you multiply one quantity by a constant to find the other quantity.
34. A line that intersects two or more lines.
37. The number of possible outcomes for an event.
38. This type of expression uses variable quantities represented by letters that take place of numbers and also uses constants.
41. A relationship of direct proportionality that, when plotted on a graph, traces a straight line.
42. The opening between two straight lines that meet at a vertex (same point). They can be interior or exterior.
44. These shapes can be broken down into our previous polygons. Look for shapes that you know.
45. A quantity that remains fixed in a problem.