

Grade 6 Mathematics Unit Preview

Quarter 4: Algebra, Patterns, and Functions

Objectives: (Your student will be able to)

- **Plot and name an ordered pair from a point on the coordinate plane in all four quadrants.**
For example, (1,2) quadrant I; (1,-2) quadrant II; (-1,2) quadrant III; and (-1,-2) quadrant IV.
- **Identify and describe the change represented in a graph.**
- **Select and then apply appropriate problem-solving strategies to solve a problem from visual, numerical, and symbolic perspectives.**
 - Visual - draw a picture or diagram, create a list, table or graph, act it out, use manipulatives, use spatial reasoning
 - Numerical – guess and check, look for a pattern
 - Symbolic – write an equation or number sentence, working backwards
- **Solve and graph linear equalities and inequalities.**
For example, use an equation to complete a table and then graph the ordered pairs.
- **Determine the unknown in a linear equation.**

Vocabulary: (Words your student will need to understand)

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| • Decrease: To take away or become smaller. | • Increase: To become larger in size or quantity. |
| • Ordered pair: A pair of numbers used to locate a point on a coordinate plan. The first number tells how far to move horizontally and the second number tells how far to move vertically. | • Linear equation: An equation involving two variables: its graph is a straight line on a coordinate plane. |
| • Quadrant: One of the four regions of a coordinate plane. | • x-axis: The horizontal number line on a coordinate plane. |
| • y-axis: The vertical number line on a coordinate plane. | |

Activities to do with your student (in addition to homework, optional):

- Plot ordered pairs. Write clues about the ordered pairs that you wrote.
- Practice solving problems.
- Write equations. Solve the equations and graph the equations.

