Honors Physics Mr. McMullen

Name _____ Date _____ Period_____

Mathematical Relationships

A. Completing Concepts

In the space to the left, write the answer that best completes each statement.

_____ 1. When an operation is performed on one side of an equation, the _____ operation must be performed on the other side of the equation.

_____ 2. It is customary to isolate the _____ on the left side of an equation.

_____ 3. In performing an experiment, the values of the _____ variable are carefully changed and the corresponding values of the _____ variable are then measured.

_____ 4. In graphing, the values for the _____ variable usually are plotted on the horizontal (*x*) axis.

_____ 5. The graph of a(n) _____ variation is a straight line passing through the origin.

_____ 6. The shape of the graph which shows the dependent variable in inverse variation with the independent variable is a(n) _____ .

_____ 7. A graph whose shape is a(n) _____ indicates that the dependent variable varies as the square of the independent variable.

_____ 8. When one quantity varies directly with another, the second quantity will _____ as the first increases.

_____ 9. When one quantity varies inversely with another, the second quantity will _____ as the first increases.

_____ 10. The general equation for a graph which is a straight line passing through the origin is _____ .

_____ 11. The general equation of a parabola is _____ .

_____ 12. The general equation of a hyperbola is _____ .

_____ 13. The _____ of an angle in a right triangle equals the opposite side divided by the adjacent side.

_____ 14. The trigonometric function _____ is equal to the adjacent side divided by the hypotenuse.

_____ 15. The trigonometric function _____ is equal to the opposite side divided by the hypotenuse.