|  |
| --- |
| Unit 4: One-Step Equations and Inequalities |
| Vocabulary Term | What does it mean? Definition | What does it look like?Picture/Example |
| Equation | A mathematical sentence containing an equal sign, showing two equivalent values |  |
| Inverse operation | Opposite operations that “undo” each other |  |
| Variable | A symbol, usually a letter, that represents a number |  |
| Inequality | A statement showing that two values are NOT equal, using one of the following signs: >, <, ≥, ≤, or ≠ |  |
| Constant of proportionality | The constant *k* in a direct variation equation; it is the ratio of $\frac{y}{x}$ , or of $\frac{dependent variable}{independent variable}$ . It is the same as the unit rate. |  |
| Direct proportion (direct variation) | A relationship between two variables, *x* (independent) and *y* (dependent), that can be written as *y* = *kx*, where *k* ≠ 0 |  |
| Dependent variable | The “output,” or y value, which “depends” on the input/x value/independent variable |  |
| Independent variable | The “input,” or x value, which determines on the output/y value/dependent variable |  |



|  |
| --- |
| Unit 4: One-Step Equations and Inequalities |
| Vocabulary Term | What does it mean? Definition | What does it look like?Picture/Example |
| Equation | A mathematical sentence containing an equal sign, showing two equivalent values |  |
| Inverse operation | Opposite operations that “undo” each other |  |
| Variable | A symbol, usually a letter, that represents a number |  |
| Inequality | A statement showing that two values are NOT equal, using one of the following signs: >, <, ≥, ≤, or ≠ |  |
| Constant of proportionality | The constant *k* in a direct variation equation; it is the ratio of $\frac{y}{x}$ , or of $\frac{dependent variable}{independent variable}$ . It is the same as the unit rate. |  |
| Direct proportion (direct variation) | A relationship between two variables, *x* (independent) and *y* (dependent), that can be written as *y* = *kx*, where *k* ≠ 0 |  |
| Dependent variable | The “output,” or y value, which “depends” on the input/x value/independent variable |  |
| Independent variable | The “input,” or x value, which determines on the output/y value/dependent variable |  |



|  |
| --- |
| Unit 4: One-Step Equations and Inequalities |
| Vocabulary Term | What does it mean? Definition | What does it look like?Picture/Example |
|  | A mathematical sentence containing an equals sign, showing that two expressions are equivalent |  |
|  | Opposite operations that “undo” each other |  |
|  | One part of an algebraic expression that may be a number, a variable, or a product of both |  |
|  | A symbol, usually a letter, that represents a number |  |
|  | For real numbers *a, b,* and *c*, if *a* = *b*, then *a* + *c* = *b* + *c*. |  |
|  | For real numbers *a, b,* and *c*, if *a* = *b*, then *a* - *c* = *b* - *c*. |  |
|  | For real numbers *a, b,* and *c*, if *a* = *b*, then *ac* = *bc*. |  |
|  | For real numbers *a, b,* and *c*, where c ≠ 0, if a = b, then $\frac{a}{c}$ = $\frac{b}{c}$ |  |
| Vocabulary Term | What does it mean? Definition | What does it look like?Picture/Example |
|  | A statement showing that two expressions are NOT equal, using one of the following signs: >, <, ≥, ≤, or ≠ |  |
|  | The constant *k* in a direct variation equation; it is the ratio of $\frac{y}{x}$ , or of $\frac{dependent variable}{independent variable}$ . |  |
|  | A relationship between two variables, *x* (independent) and *y* (dependent), that can be written as *y* = *kx*, where *k* is a non-zero constant. |  |
|  | An equation that states that two ratios are equal. |  |



|  |  |  |  |
| --- | --- | --- | --- |
| Direct Proportion (Direct Variation) | Addition Property of Equality | Inverse Operations | Division Property of Equality |
| Inequality | Equation | Proportion | Variable |
| Term | Subtraction Property of Equality | Constant of Proportionality | Multiplication Property of Equality |