Unit 3: Relations, functions, and graphs

Table, Graph, Formula

(Chapter 3, page 104)

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|  | Relation is set of ordered pairs.  Domain: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  Range: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  ---- Examples: | Definition  Page 107 |
|  | **Graph**  Terms to know:  ---- Cartesian coordinate system; Origin  ---- Quadrants  ---- x-axis, y-axis  ---- Coordinate of a point  ---- x-coordinate, abscissa ; y-coordinate, ordinate | Page 110 |
|  | **Function**  Relation in which each input has exactly one output.  ---- Vertical line test | Page 117  (plot examples in the next table cell) |
|  | **One-to-One function**  Function in which each output originated from exactly one input.  ---- Horizontal line test |  |

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|  | Plot an example of a relation, a function, and one-to-one function.  Relation Function One-to-one function      Domain:  Range:  Vertical line test:  Horizontal line test: | |
|  | Function composition  ;    ( Hint: , and )      Notation: | Definition  Page 149 |

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