## Arc of Learning for Moving Straight Ahead

The primary goal of Moving Straight Ahead is for students to develop an understanding of linear relationships. Students recognize linear relationships by the constant rate of change between two variables in a contextual situation, a table, a graph, or an equation.
Moving Straight Ahead:

| Linear Relationships |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Linear Relationships | Introduction <br> Setting the <br> Scene | Exploration <br> Mucking <br> About | Analysis <br> Going <br> Deeper | Synthesis <br> Looking <br> Across | Abstraction <br> Going <br> Beyond |

## Investigation 1: Walking Rates

| 1.1 Walking Marathons: Finding and Using Rates | $\mathbf{1 . 1}$ |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1.2 Walking Rates and Linear Relationships: <br> Tables, Graphs, and Equations | $\mathbf{1 . 2}$ |  |  |  |
| 1.3 Raising Money: Using Linear Relationships |  | 1.3 |  |  |
| 1.4 Using the Walkathon Money: Recognizing <br> Linear Relationships |  | 1.4 |  |  |
| Mathematical Reflections | MR |  |  |  |

Investigation 2: Exploring Linear Relationships With Graphs and Tables

| 2.1 Henri and Emile's Race: Finding the Point of <br> Intersection |  | 2.1 | 2.1 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 2.2 Crossing the Line: Using Tables, Graphs, and <br> Equations |  |  | 2.2 |  |  |
| 2.3 Comparing Costs: Comparing Relationships |  | 2.3 |  |  |  |
| 2.4 Connecting Tables, Graphs, and Equations |  |  | 2.4 |  |  |
| Mathematical Reflections |  |  | MR |  |  |

Investigation 3: Solving Equations

| 3.1 Solving Equations Using Tables and Graphs |  |  | 3.1 |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 3.2 Mystery Pouches in the Kingdom of Montarek: <br> Exploring Equality |  | 3.2 |  |  |  |
| 3.3 From Pouches to Variables: Writing Equations |  |  | 3.3 |  |  |
| 3.4 Solving Linear Equations |  | 3.4 |  | 3.5 |  |
| 3.5 Finding the Point of Intersection: Equations <br> and Inequalities |  |  | 3.5 | 3 |  |
| Mathematical Reflections |  |  |  | MR |  |

Investigation 4: Exploring Slope: Connecting Rates and Ratios

| 4.1 Climbing Stairs: Using Rise and Run |  |  | 4.1 |  |
| :--- | :--- | :--- | :--- | :--- |
| 4.2 Finding the Slope of a Line |  |  |  | 4.2 |
| 4.3 Exploring Patterns with Lines |  |  | 4.3 | 4.3 |
| 4.4 Putting It All Together: Writing Equations for <br> Linear Relationships |  |  |  | 4.4 |
| Mathematical Reflections |  |  |  | 4.4 |
| Looking Back |  |  |  | MR |

