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| * 1.1.1-Interpreting Graphs-What stories can a graph tell?In this first section, you will focus on several challenges that will require you to use different problem-solving strategies.  All of the problems are solvable with your current math skills.  Some of them will be revisited later in the course so that you can apply algebraic tools to solve them more efficiently at that time.  Each problem also introduces you to an important concept that you will study in this course. * **1-1.** GETTING TO KNOW YOU, Part One * How can a graph tell a story?  Today you will meet your team members and then work together to write a story for a graph. * **Your Task:**Your teacher will give you one part of a graph.  Find the students in the class who have the other pieces of the same graph.  When you find all of the students whose graph parts belong with yours, sit down together around a table or with your desks facing each other. * As a team, come up with a story that could be represented by your team’s graph.  Think carefully about each part of the graph.  Once your team agrees on a story, make sure every member of the team can describe each part of the story.  You should also be able to explain its connection to the corresponding part of the graph. * To help you and your team work together today, each member of your team has a specific job.  Your job is assigned by your first name (or last name if team members have the same first name).   **Team Roles**   * **Resource Manager:** If your name comes first alphabetically:   + Make sure that the team has tape.   + Ask the teacher when the *entire* team has a question.*“No one has an idea?  Should I ask the teacher?”*   + Make sure your team cleans up by delegating tasks.  You could say, *“I will put away the \_\_\_\_\_\_\_\_ while you \_\_\_\_\_\_\_\_\_ .”*   **Facilitator:**If your name comes second alphabetically:   * + Start the team’s discussion of the graph by asking, “What could this graph be about? What are some ideas?”   + Help the team agree on a story: *“Do we agree on all of the parts of our story?”*   **Recorder/Reporter:** If your name comes third alphabetically:   * + Tape the graph pieces together on a piece of paper to form the graph.   + Take notes for the team. The notes should include phrases like, “For part one…” and explanations like, “Because part one is not so steep…”   **Task Manager:**If your name comes fourth alphabetically:   * + Remind the team to stay on task and not to talk to students in other teams. You can suggest, “Let’s move on to another part of the graph.”   + Listen for reasons and challenge your teammates to justify their thinking. “But why do you think that?”   http://textbooks.cpm.org/images/cc3/chap01/cc3_ch1_less_1.1.1_1-2.png   * **1-2.** GETTING TO KNOW YOU, Part Two * Suppose the graph at right represents something about the four students in your team. But what is the graph about? Decide what information the x- and y-axes could represent so that each point represents a different member of your team. Justify your statements. |