

Part A: Find a picture of an object with a straight side. I give them a piece of clear plastic transparency paper with a grid printed on it. They tape the grid onto the picture and then measure the slope of the object. Then they need to do a "write up," wherein they are supposed to describe in words the mathematical process they followed. The write-up is really for me, because if they understand the concept of slope they can write up the process in 1-2 sentences. If they don't understand the idea of slope, it becomes clear as their write-up meanders about.

Part B: Using the points and the slope from part A, find the linear equation to describe the line in Part A. Write a brief paragraph describing the steps they followed.

Part C: In a newspaper or magazine, find some data which describe a linear relationship. Using two of the data points, find the linear equation for the line between them. Take a third point from the data, plug it into the equation and compare the predicted value with the actual value. Write a paragraph describing the process followed. Again, if the student understands the process, the write-up can be quite brief. It's the students who don't understand who write and write.