## Walk the Plank

As you, your teacher, and other classmates walk the plank, use the chart below to record the weight shown on the scale.

| NAME OF |  |  |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| WALKER | DISTANCE FROM SCALE |  |  |  |  |  |  |
| TEACHER |  |  | $12 "$ | $24 "$ | $36 "$ | $48 "$ | $60 "$ |
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Using the data from the chart, plot the points. Use a different color for each person.


1. How are the lines similar?
2. How are the lines different?
3. What does the slope represent in the context of this situation?
4. What does the $y$-intercept represent in the context of this situation?
5. Write an equation for the line representing the weights shown when the teacher walked the plank, and write an equation for your line.
6. Imagine that a 3000 -pound elephant walked the plank. What weight would be shown on the scale if the elephant stood at the 48 " line?
7. Where would the elephant need to stand for the scale to show a weight of 2000 pounds?
