Graphing Practice Name:

Use the information below to graph the results of two joggers.

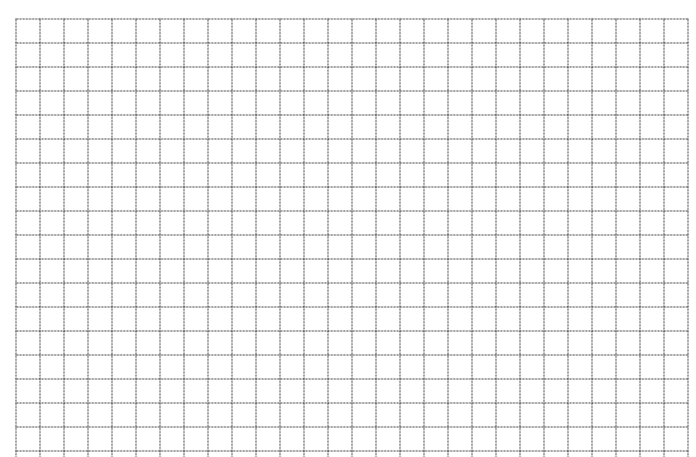
Susan Bob

|  |  |
| --- | --- |
| Time in minutes | Distance in km |
| 1 | 1 |
| 3 | 5 |
| 7 | 7 |
| 11 | 12 |
| 19 | 15 |
| 21 | 25 |

|  |  |
| --- | --- |
| Time in minutes | Distance in km |
| 2 | 1 |
| 4 | 8 |
| 8 | 12 |
| 14 | 15 |
| 16 | 17 |
| 18 | 19 |
| 20 | 21 |
| 22 | 23 |
| 24 | 25 |

Procedure

1. Label the x (horizontal) axis “time”. Be sure to include units.
2. Label the y (vertical) axis “distance”. Be sure to include units.
3. Decide the maximum number of squares you will need for each axis by looking at your highest number for each set of data. In this case your highest time is 12minutes. You have 13 squares so make your last value 13 minutes.
4. Decide how much each square will represent. In this case each square can represent 1 min on the x-axis and 1 km on the y-axis.
5. Label your tick marks, beginning with 0 for both x and y axis.
6. The lower most left point on the graph is the *origin* and should be (0,0).
7. Plot Susan’s time vs distance with dots or “x’s”. Connect the dots.
8. On the same graph, do the same for Bob *in a different color*.
9. Because you are comparing two different data sets on the same graph, you need to tell them apart. You must include a *legend.*
10. Give your graph a descriptive title.



Interpret your graph:

1. Which jogger ran the farthest?
2. Which jogger ran the fastest?
3. How far did Susan run in 19 minutes?
4. How long did it take Bob to run 13 km?
5. Which runner was more erratic?
6. What is your prediction for how far Bob will be in 26 min?