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## Terry vs. Jade vs. Susan

Use the information in the table to create a distance-time graph. Be sure to include all parts of a graph including a key. Then answer the questions on the back.

| Time (s) | Distance (m) |  |  |
| :---: | :---: | :---: | :---: |
|  | Terry | Jade | Susan |
| 0 | 0 | 0 | 0 |
| 1 | 1.5 | 2.5 | 2 |
| 2 | 3 | 5 | 4 |
| 3 | 4.5 | 7 | 6 |
| 4 | 6 | 9 | 9 |
| 5 | 7.5 | 10 | 11 |
| 6 | 9 | 12 | 12.5 |
| 7 | 10.5 | 13.5 | 15 |
| 8 | 12 | 15 | 17.5 |
| 9 | 13.5 | 17 | 19 |
| 10 | 15 | 18 | 21 |

Terry vs. Jade vs. Susan

Terry
Jade

- Susan


Time (s)

Susan 1. Who came in $1^{\text {st }}$ place?

Jade 2. $2^{\text {nd }}$ place?

Terry 3. $3^{\text {rd }}$ place?

The top line is the runner that was first.4. By looking at the graph, how do you know which runner was first?

No 5. Was this runner always in first place?

4 seconds 6. At what time were 2 runners at the same distance?

Terry 7. Which runner ran at a constant speed?

Terry's line is a straight diagonal line. 8. By looking at the graph, how do you know this?
No $\qquad$ 9. Did any runner stop during the race?

It would be horizontal for the time period the runner had stopped. 10. What would a line for a person stopping look like?

Calculate the speed for each runner at 5 seconds. Round to the tenths place.
$1.5 \mathrm{~m} / \mathrm{s}$
11. Terry $(7.5 \mathrm{~m} / 5 \mathrm{~s}=$ speed $)$
$2.0 \mathrm{~m} / \mathrm{s}$
12. Jade ( $10 \mathrm{~m} / 5 \mathrm{~s}=$ speed $)$
$2.2 \mathrm{~ms} /$
13. Susan (11m / 5s=speed)

Calculate the average speed for each runner. Round to the tenths place. (Average speed is total distance traveled by total time.)
$1.5 \mathrm{~m} / \mathrm{s}$
14. Terry $(15 \mathrm{~m} / 10 \mathrm{~s}=$ speed $)$
$1.8 \mathrm{~m} / \mathrm{s}$
15. Jade $(18 \mathrm{~m} / 10 \mathrm{~s}=$ speed $)$
$2.1 \mathrm{~m} / \mathrm{s}$
16. Susan $(21 \mathrm{~m} / 10 \mathrm{~s}=$ speed $)$

