**Ready, Set, Go! Who walked faster?**

1. What does the word ‘speed’ mean? **Hint:** Use it in a sentence: *“The car’s speed was 35 miles per hour.”*

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1. On the teacher computer, we have modeled four of Charneisha and Andre’s approximate step sizes using the programs we created on Thursday. Their step size data is below.

|  |  |  |
| --- | --- | --- |
| **Steps** | **Approximate Step Size (inches) - Charneisha** | **Approximate Step Size (inches) - Andre** |
| Step 1 | 15 | 20 |
| Step 2 | 15 | 20 |
| Step 3 | 15 | 20 |
| Step 4 | 15 | 20 |
| **TOTAL DISTANCE:** |  |  |

1. Who do you think walked faster - Charneisha or Andre?

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1. How did you know who walked faster?

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1. Did Charneisha and Andre walk the same amount of time? How do you know?

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1. What is Charneisha’s Speed? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
2. What is Andre’s Speed? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
3. How much faster would Charneisha have to walk to walk at the same speed as Andre?

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We have learned how to calculate the total distance someone has walked if we know their approximate step size and how many steps they took: Fill in the blanks below to remind us of our formula:

**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ X \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ = Total Distance Traveled**

What if we wanted to know how far ANY object traveled? Cars, airplanes and other vehicles do not have feet to measure step sizes, how can we calculate how far they have traveled?

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Number of Steps** | **X** | **Step Size** | **=** | **Total Distance Traveled Walking** |
|  | **X** |  | **=** | **Total Distance Traveled for ANY object** |

Let’s test our new formula!

1. An airplane flew at 750mph for 3 hours, how many miles did the airplane fly? (You can use a calculator to find the answer.)

**Which car traveled further?**

|  |  |  |
| --- | --- | --- |
| **Time (hrs)** | **Speed of Car 1 (mph)** | **Speed of Car 2 (mph)** |
| Hour 1 | 45 | 35 |
| Hour 2 | 45 | 35 |
| Hour 3 | 45 | 35 |
| Hour 4 | CAR STOPPED. | 35 |
| **TOTAL DISTANCE:** |  |  |

The driver’s of Car 1 and Car 2 are competing to see which car travels further. Car 2 wants to drive 35 miles per hour for 4 hours. Car 1 thinks that they only need to drive 45 miles per hour for 3 hours to travel further than Car 2. Who wins the bet?

Use two-turtle ViMAP to figure out which car won the bet and traveled further. Record your program in the space below.

|  |  |
| --- | --- |
| **Car 1** | **Car 2** |
| Setup | Set Up |
|  |  |
| Go | Go |
|  |  |

1. How far did Car 1 travel?
2. How far did Car 2 travel?
3. If Car 1 had decided to continue driving for hour 4, would they have driven farther than Car 2?