

# Carousel Columbia



## Data:

1. Time for one revolution: \_\_\_\_\_seconds
2. Estimate the distance between two consecutive **inside** riders. \_\_\_\_\_ft; \_\_\_\_\_m
3. Estimate the distance between two consecutive **outside** riders. \_\_\_\_\_ft; \_\_\_\_\_m
4. Total time the carousel was in motion: \_\_\_\_\_min.

## Questions:

1. Your body is thrown slightly to the ..... a. outside    b. inside as the ride turns.
2. You feel lighter when your horse is moving ..... a. up    b. down.
3. The animals on the ..... a. outside    b. inside ..... move faster.

## Calculations:

1. What is the distance the **outside rider** traveled in one revolution?
  
  
  
  
  
  
  
  
  
  
2. What is the distance the **inside rider** traveled in one revolution?

\*\*\*Hint: Multiply the distance between two consecutive riders by the number of riders on the (1) outside (2) inside.\*\*\*

3. Calculate the speed of the **outside rider**.  
\_\_\_\_\_ft/sec, \_\_\_\_\_m/sec

\*\*\* Hint:  $s = d/t$  \*\*\* ( show all work )

4. Calculate the speed of the **inside rider**.

\_\_\_\_\_ft/sec, \_\_\_\_\_m/sec

5. Which rider, the inside or outside has the greater speed?

Why? Explain your answer in terms of distance & time.

6. Calculate the total distance the outside rider has traveled during the time the carousel was in motion. (show work)

\_\_\_\_\_ft, \_\_\_\_\_m