11-3

Constant Speed



Launch

CCSS: 6.RP.A.3b: Solve unit rate problems including those involving unit pricing and constant speed. For example, if it took 7 hours to mow 4 lawns, then at that rate, how many lawns could be mowed in 35 hours? At what rate were lawns being mowed?

SAMPLE SOLUTIONS ARE SHOWN BELOW.



Three riders try out for one spot on a bike team with different coaches for different distances with different times.

What factors should the coaches consider when picking a rider? Which rider should they pick? Justify your choice.

Rider	Distance (miles)	Time (minutes)
Rider 1	5	20
Rider 2	6	30
Rider 3	8	40

Factors to Consider:

The coaches should consider the distances and times of each rider, and which one rode the fastest.

The Rider to Pick:

The coaches should pick Rider 1, the fastest rider.

Rider 1 rides 1 mile in 4 minutes. $20 \div 5 = 4$

Riders 2 and 3 ride 1 mile in 5 minutes. $30 \div 6 = 5$

 $40 \div 8 = 5$

Reflect What could the coaches have done to make the try-outs better?

Sample: The coaches could have used the same distance or

the same time for each rider to make the comparisons easier. If

they used the same distance, they could just compare the times

to find the fastest rider.

Got It?

PART 1 Got It me

Lisa bikes at a constant speed of 8 miles per hour. If she bikes for 30 minutes, how far does she travel?

4 mi

PART 2 Got It mo

A bus travels 70 miles in 2 hours. What is the speed of the bus in miles per hour? Use the equation d = rt.

35 mi/h

Got It?

PART 3 Got It (1 of 2) me

On an even busier road, your friend's mother drives 12 miles in 36 minutes. At this speed, how long does it take your friend's mother to drive 2 miles?

6 min

PART 3 Got It (2 of 2)

Your friend plans to bike to school. Your friend bikes at a constant speed of 9 miles per hour and lives 6 miles from school. If your friend leaves home 35 minutes before school starts, will your friend make it to school on time?

No, your friend will not make it to school on time. In 35 minutes, your friend will have traveled 5.25 miles, not 6 miles.