

Three Cyclists:

A team of three cyclists takes part in a race.

The cyclists Jay, Kim and Ryan do the distance in the ratio $7:3:4$.

Kim cycles 177 km.

a) How far does Jay cycle? $\rightarrow 413$ km

b) How far is the race? $\rightarrow 826$ km

Solution:

$$177 : 3 = 59 \text{ km}$$

So if each ratio is 59 km, seven ratios are ...

$$59 \cdot 7 = \boxed{413 \text{ km}}$$

And the kms total of the race are ...

$$413(59 \cdot 7) + 177(59 \cdot 3) + 236(59 \cdot 4) = \boxed{826 \text{ km}}$$