Road Corner, 2016-08-01

Speed

Spe Eddy

Let's do it quickly!

1 Problem – Number of pages

Piotr Nieżurawski, update: 2017-09-10, id: en-numbers-0000500, diff: 1

Wanda started reading a book at the beginning of page 32. After two hours she finished at the end of page 79.
a) How many pages did she read?
b) How many pages did she read on averege in one hour?

Hint: If Wanda started reading at the beginning of page 1 and finished at the end of page 2, how many pages would she read?

Answer: Wanda read 48 pages, her average rate was 24 pages per hour.

2 Problem – Cycling speed

Piotr Nieżurawski, update: 2016-07-30, id: en-speed-distance-time-0004000-dpc, diff: 3

Max went by bike from the starting line and rode at the average speed 5.7 m/s. Ann started from the same line 10 s after Max and she finished the race 10 s before Max. Both, Ann and Max, travelled the same distance. What was the Ann's average speed if the total time of her ride was equal to 570 s?

Hint: How much time was Max biking? Answer: 590 s.

Hint: What was the length of the route? (Max...) Answer: 3363 m.

Answer: Ann was cycling with speed 5.9 m/s.

3 Problem – Accelerating airplane

Piotr Nieżurawski, update: 2016-07-30, id: en-kinematics-0000500-dpc, diff: 1

An airplane, initially at rest in the airport, started to move along a runway with the constant acceleration equal to 8.94 m/s^2. Calculate the airplane's speed after the time of 7 s.

Hint: $v = at$

Answer: 62.58 m/s

