Dotfield, 2017-09-09

Problems with decimal place control

Inspector Tenth

Maximal number of decimal places: **1**

1 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 4.2 m/s^2. Calculate the airplane's speed after the time of 4 s.

Hint: $v = at$

Answer: 16.8 m/s

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 6.2 m/s. Ann started from the same line 6 s after Max and she finished the race 6 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 372 s?

Hint: How much time was Max biking? Answer: 384 s.

Hint: What was the length of the route? (Max...) Answer: 2380.8 m.

Answer: Ann was cycling with speed 6.4 m/s.

