

Exercise

Kinematics_Part2

by

Siti Aisah binti Harun
Faculty of Industry Science & Technology
aishahh@ump.edu.my



Kinematics

by Siti Aisah Harun

<http://ocw.ump.edu.my/course/view.php?id=458>

Exercise 1

- An electric bicycle accelerates uniformly from point A to point B in 2.47 seconds. If its velocity at point A is 18.5 m/s and velocity at point B is 46.1 m/s, calculate the
 - (a) acceleration of the bicycle . (11.174 m/s⁻²)
 - (b) distance traveled. (79.781 m)



Kinematics

by Siti Aisah Harun

<http://ocw.ump.edu.my/course/view.php?id=458>

Exercise 2

- Determine the taxi's average speed be in order to travel 235 km in 3.25 h? (72 km/h)



Kinematics

by Siti Aisah Harun

<http://ocw.ump.edu.my/course/view.php?id=458>

Exercise 3

- A small pillow is released from the top of a cliff. It is seen to hit the ground below after 3.75 s. How high is the cliff? (68.9 m)



Kinematics

by Siti Aisah Harun

<http://ocw.ump.edu.my/course/view.php?id=458>

Exercise 4

- Willey throws the ball straight upward with a velocity of 8 ms^{-1} at the edge of a cliff having a height of 40 m. Calculate
 - (a) the maximum height the ball can reach from the cliff. (3.262 m)
 - (b) the time taken before the ball reach the ground. (3.785 s)



Kinematics

by Siti Aisah Harun

<http://ocw.ump.edu.my/course/view.php?id=458>