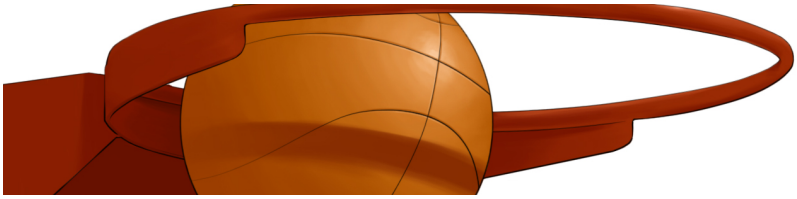
Unit 1 Quiz

Due No due date **Points** 20 **Questions** 20 **Time limit** None
Allowed attempts 3

Instructions



Before you begin working on this assignment, please read this information:

- Unit quizzes **do** count toward your course grade.
- Double-check your work before submitting the assignment.
- You can save your work and continue later, if you need to.
- The assignment is **open book**—you can refer back to the lesson material to find answers.

Attempt history

	Attempt	Time	Score
KEPT	Attempt 3	13 minutes	15 out of 20
LATEST	Attempt 3	13 minutes	15 out of 20
	Attempt 2	5 minutes	12 out of 20
	Attempt 1	22 minutes	11 out of 20

ⓘ Correct answers are hidden.

Score for this attempt: **15** out of 20
Submitted 18 Mar 2019 at 11:05
This attempt took 13 minutes.

Question 1	1 / 1 pts

What is the abbreviation for centigram?

- cgm
- ctg
- ctgm
- cg

Question 2

1 / 1 pts

How many kilometers are in 250m?

- 25 km
- 0.25 km
- 250 km
- 2.5 km

Question 3

1 / 1 pts

Which of the following is a metric unit for mass?

- slug
- kilogram
- newton

- pound

Question 4

1 / 1 pts

What is the metric prefix for 1/10?

- deci
- deka
- centi
- milli

Question 5

1 / 1 pts

Five dekaliters is equal to how many liters?

- 0.5 liters
- 0.05 liters
- 50 liters
- 500 liters

The next four questions refer to the following experiment.
A student rolls a small ball across a table. It leaves the edge of the table and strikes the floor some distance away from the table. The process is

repeated several times, with the student releasing the ball at different speeds to see how much farther away from the table the ball falls.

Incorrect

Question 6

0 / 1 pts

What must be kept constant throughout this experiment?

- weight of the ball
- speed of the ball
- distance it travels *off* the table

You have identified one of the experimental variables. As such, it will change in the course of the experiment and should not be kept constant. You may want to go back to the discussion material for lesson 2 and read up on experimental variables.

Question 7

1 / 1 pts

What is the relationship being studied?

- speed of the ball and the distance it travels off the table.
- weight of the ball and the distance it travels off the table.
- distance it travels on the table and distance it travels off the table.
- speed of the ball and the weight on the ball.

Incorrect

Question 8

0 / 1 pts

What is the dependent variable?

- distance it travels *off* the table
- speed of the ball
- distance it travels *on* the table (before leaving the edge of the table)

The distance the ball travels on the table is not something that was mentioned that would be changed. (Recall that the distance it traveled after leaving the table was being measured, not the distance it traveled on the table.) You may want to go back to the discussion material for lesson 2 and read up on experimental variables.

- weight of the ball

Question 9

1 / 1 pts

What is the independent variable?

- weight of the ball
- distance it travels *on* the table (before leaving the edge of the table)
- speed of the ball
- distance it travels *off* the table

The next two questions refer to the following scenario:
A car enters the freeway at mile marker 110 and leaves the freeway at mile marker 145 exactly 30 minutes later.

Question 10

1 / 1 pts

What distance did the car travel?

- 70 miles
- 35 miles
- 145 miles
- 110 miles

Question 11

1 / 1 pts

What was the average speed of the car?

- 110 mi/h
- 145 mi/h
- 35 mi/h
- 70 mi/h

Question 12

1 / 1 pts

Joe walked 4 meters north, then 7 meters south. What was his *displacement*?

- 3 meters north
- 3 meters south
- 11 meters south
- 11 meters north

Question 13

1 / 1 pts

Jane traveled from Orem to Ogden (120 miles). She then traveled back to Orem. If the time for her round trip was 4 hours, what was her average *speed*?

- 120 mi/h
- 30 mi/h
- 60 mi/h
- 0 mi/h

Question 14

1 / 1 pts

Joe walked 4 meters north, then 7 meters south. What distance did Joe walk?

- 7 meters

- 11 meters
- 4 meters
- 3 meters

Incorrect

Question 15

0 / 1 pts

Which of the following statements is true?

- The slope of a velocity vs. time graph is the displacement.

The slope of a velocity vs. time graph does not represent the displacement. You may want to review the material from lesson 4. You can also get more help with velocity- and position-time graphs in the lesson 1 folder in the virtual practice lab. Check out problems 6 and 7.

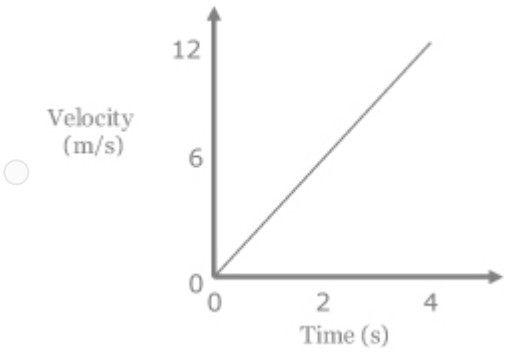
- The slope of a position vs. time graph is the distance.
- The slope of a velocity vs. time graph is the ending position.
- The slope of a position vs. time graph is the velocity.

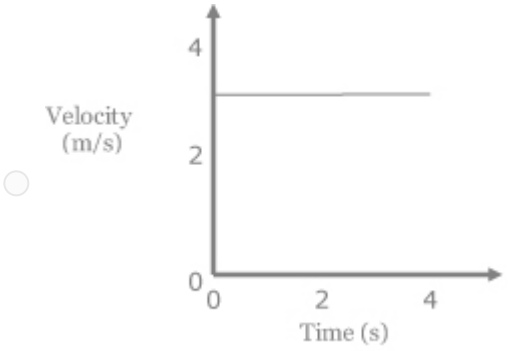
Incorrect

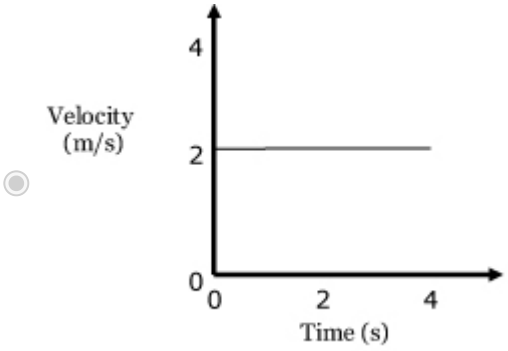
Question 16

0 / 1 pts

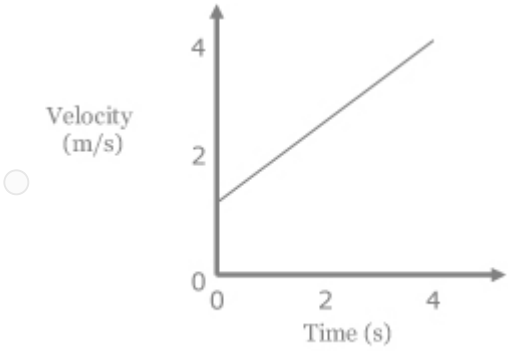
A jogger is moving at 3 m/s with a constant velocity. Which of the following graphs best represents this motion?







You have identified a velocity vs. time graph that represents constant velocity; however, that velocity is not 3 m/s. There was a much better choice. You may want to review the material from lesson 4. You can also get more help with velocity- and position-time graphs in the lesson 1 folder in the virtual practice lab. Check out problems 6 and 7.

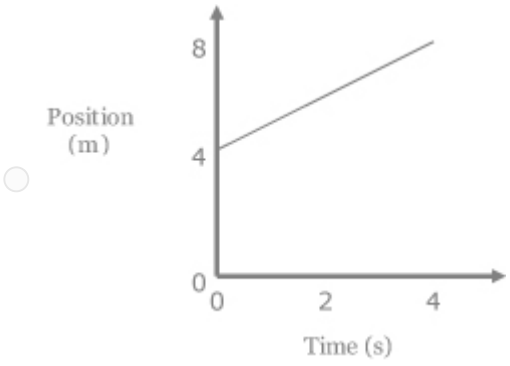


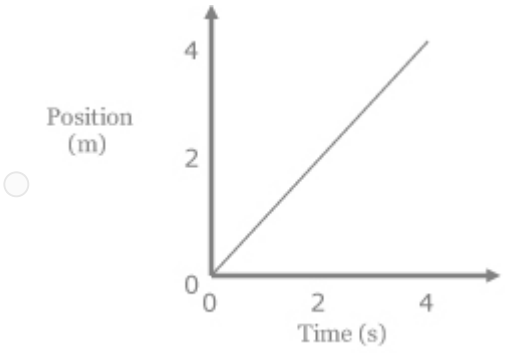
Incorrect

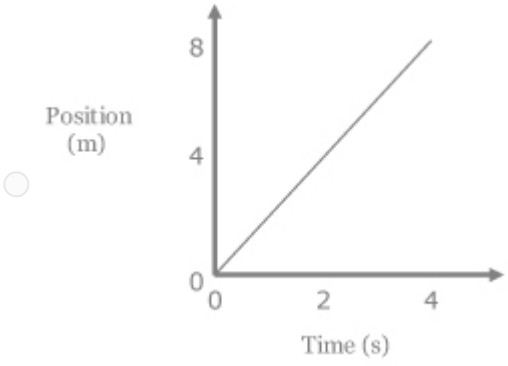
Question 17

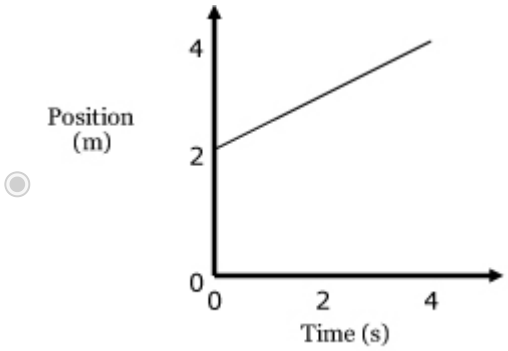
0 / 1 pts

A dog is walking at 2 m/s. Which of the following graphs best represents the correct slope?









Since the dog is walking at 2 m/s, the slope of the graph needs to be 2 m/s. The graph you selected has a slope of 0.5 m/s. You may want to review the material from lesson 4. You can also get more help with velocity- and position-time graphs in the lesson 1 folder in the virtual practice lab. Check out problems 6 and 7.

Question 18

1 / 1 pts

A car is traveling on the highway at 20 m/s when a deer jumps out on the road. The driver hits the brakes and comes to a stop in 4 seconds. What is the acceleration?

- -5 m/s²
- -20 m/s²
- 5 m/s²
- 20 m/s²

Question 19

1 / 1 pts

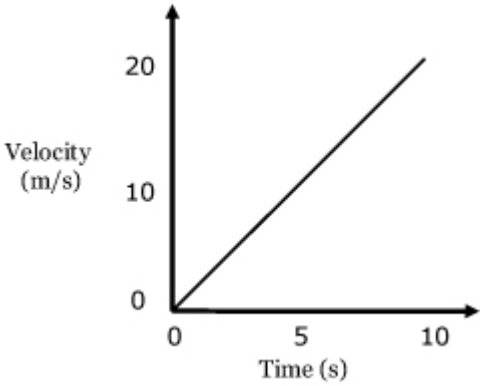
A rock is dropped from the top of a building. After 4 seconds it is moving at 40 m/s. What was the acceleration of the rock?

- 10 m/s² (selected)
- 40 m/s²
- 4 m/s²
- 44 m/s²

Question 20

1 / 1 pts

Find the acceleration from the following velocity vs. time graph:



- 5 m/s²
- 2 m/s² (selected)
- 20 m/s²
- 10 m/s²

Quiz score: **15** out of 20