Constant Velocity Test Review

⚠ This is a preview of the published version of the quiz

Started: Aug 29 at 2:05pm

Quiz Instructions

Round your answers to two decimal places.

Rank numbers based on the number line.

Question 1   1 pts

Constant velocity slow and fast toy cars face each other. The slow car begins at position 6 meters and has velocity -2 m/s. The fast car begins at position 4 meters and has velocity 6 m/s. At what time in seconds do both cars meet?

Do not type units, only the numeric values.

[   ]

Question 2   1 pts

Constant velocity slow and fast toy cars face each other. The slow car begins at position 6 meters and has velocity -2 m/s. The fast car begins at position 4 meters and has velocity 6 m/s. At what position in meters do both cars meet?

Do not type units, only the numeric values.

Question 3   1 pts

Constant velocity slow and fast toy cars face the same direction. The slow car begins at position 5 meters and has velocity 3 m/s. The fast car begins at position -7 meters and has velocity 15 m/s. At what time in seconds do both cars meet?

Do not type units, only the numeric values

Question 4   1 pts

Constant velocity slow and fast toy cars face the same direction. The slow car begins at position 5 meters and has velocity 3 m/s. The fast car begins at position -7 meters and has velocity 15 m/s. At what position in meters do both cars meet?

Do not type units, only the numeric values

Question 5

1 pts

A velocity of +2 m/s is larger than a velocity of -10 m/s.

Use the number line.

- ○ True

- ○ False

Question 6

1 pts

Displacement is final position minus initial position.

- ○ True

- ○ False

Question 7

1 pts

A number with a direction.

○ vector

○ scalar

○ speed

○ distance

Question 8

1 pts

A number without a direction.

○ scalar

○ vector

○ velocity

○ displacement

Question 9

1 pts

The area under the displacement-time graph is the change in velocity.

○ True

○ False

Question 10   1 pts

Displacement can leave out information about the motion of an object between its initial and final positions.

○ True

○ False

Question 11   1 pts

Displacement can provide an overall direction whereas distance does not.

○ True

○ False

Question 12   1 pts

Final minus initial or 'change in'.

○ delta

○ scalar

○ distance

○ average speed

Question 13

1 pts

This only takes into account final and initial positions. It has an overall direction. Written as delta X. It is a vector.

○ displacement

○ distance

○ scalar

○ average speed

○ instantaneous speed

Question 14

1 pts

Total length traveled without regard to direction. It is a scalar.

○ distance

○ displacement

○ intantaneous speed

○ average velocity

Question 15

1 pts

Total distance divided by total time. It is a scalar.

○ average speed

○ displacement

○ average velocity

Question 16

1 pts

Displacement divided by time. It is a vector.

○ average velocity

○ instantaneous velocity

○ instantaneous speed

○ average speed

○ distance

Question 17

1 pts

The velocity of an object at a particular moment in time.

○ instantaneous velocity

○ instantaneous speed

○ average velocity

○ average speed

Question 18

1 pts

The speed of an object at a particular moment in time. When driving in a car, it is indicated by the speedometer needle.

○ instantaneous speed

○ instantaneous velocity

○ distance

○ displacement

Question 19

1 pts

When creating an equation of motion for objects with constant velocity the beginning position is denoted as _____.

○ Xi

○ Xf

○ V with a bar above it.

○ y

○ m

○ t

Question 20

1 pts

When creating an equation of motion for objects with constant velocity, the average velocity is denoted as _____.

○ V with a bar above it.

○ Xf

○ Xi

○ t

○ y

○ m

Question 21

1 pts

When creating an equation of motion for objects with constant velocity, the time variable is denoted as _____.

○ t

○ x

○ y

○ V with a bar above it.

○ Xi

○ Xf

Question 22

1 pts

Motion maps display what type of vectors?

○ velocity

○ displacement

○ acceleration

○ force

Question 23

1 pts

Distance can be negative.

○ True

○ False

Question 24

1 pts

Speed can be negative.

○ True

○ False

Question 25   **1 pts**

Displacement can be negative or positive which indicates the direction an object moved relative to its starting position.

○ True

○ False

Question 26   **1 pts**

The slope of the position-time graph is velocity.

○ True

○ False

Question 27   **1 pts**

By adding up the negative and positive area between the velocity-time curve and the time axis, you can determine displacement.

○ True

○ False

Question 28   1 pts

The slope of the velocity-time graph is displacement.

○ True

○ False

Question 29   1 pts

The area under the speed-time graph is distance.

○ True

○ False

Question 30

1 pts

The area between the velocity-time graph curve and the time axis can be positive or negative. It is negative if above the time axis and positive if below the time axis.

○ True

○ False

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