SPEED, DISTANCE, TIME, VELOCITY, AND ACCELERATION QUIZ REVIEW
QUESTION #1

Write down the equations for:

• Speed
• Distance
• Time
Formulas

\[ \text{Speed} = \frac{\text{Distance}}{\text{Time}} \]
\[ \text{Distance} = \text{Speed} \times \text{Time} \]
\[ \text{Time} = \frac{\text{Distance}}{\text{Speed}} \]
QUESTION 2

Define: Motion
Motion- A change in position, over time, relative to a reference point.
QUESTION 3

Define: Speed
The distance an object moves in an amount of time.
Define: Velocity
Speed in a Direction
QUESTION 5

Define: Acceleration
Acceleration: Change in Velocity/Speed over time.
QUESTION 6

Calculate the speed of Charlie who runs to the store 4 Km away in 30 minutes?
.13 km/min
QUESTION 7

A bicycle rider travels 50.0 Km in 2.5 hours. What is the cyclists speed?
ANSWER

20 km/hr
QUESTION 8

An ant traveled 30 seconds at a speed of .5 ft./s. How far did the ant travel?
15 feet
QUESTION 9

How much time would it take for an airplane to reach its destination if it traveled at an average speed of 790 Km/hr for a distance of 5000 kilometers?
ANSWER

6.33 Hours
A student rides her bike to school. Her school is 5 miles from home. She travels at an average rate of 15 miles per hour. How much time does she need?
.33 hour or 19.8 minutes
A rocket can travel at an average rate of 18,000 miles per hour. How far will the rocket travel in 4.5 hours?
81,000 miles
A man rode on his motorcycle for 162 miles. His average speed was 45 miles per hour. How long did his trip take?
3.6 hours
A train’s average speed is 120 km per hour. Its elapsed time is 2 hr. How far did it travel?
QUESTION 14

Suppose it takes a plane 5 hours to travel from Philadelphia to San Francisco. It travels at an average speed of 500 miles per hour. What is the distance between the two cities?
ANSWER

2,500 miles
QUESTION 15

Write the equation for acceleration:
Acceleration Formula:

$$\text{Final Velocity} - \text{Initial Velocity} \over \text{Time}$$
A car is moving from rest and attained a velocity of 80 m/s. Calculate the acceleration of the car after 5 s?
ANSWER

16 m/s²
QUESTION 17

Determine the acceleration of a coaster which moves with a velocity of 10 m/s, after 2s its velocity is increases to 26 m/s.
ANSWER

8 m/s²
QUESTION 18

A roller coaster car rapidly picks up speed as it rolls down a slope. As it starts down the slope, its speed is 4 m/s. But 3 seconds later, at the bottom of the slope, its speed is 22 m/s. What is its average acceleration?
ANSWER

$6 \text{ m/s}^2$
A lizard accelerates from 2 m/s to 10 m/s in 4 seconds. What is the lizard’s acceleration?
2 m/s²
A ball is dropped from the top of a building. After 2 seconds, it’s velocity is measured to be 19.6 m/s. Calculate the acceleration for the dropped ball.