Worksheet - Graphing Motion Solutions

 

 

**1.** Velocity is the slope of what graph?

graph D

**2.** Acceleration is the slope of what graph?

graph A

**3.** The horizontally flat section on graph D represents an object doing what?

A stationary object.

**4.** The horizontally flat section on graph A represents an object doing what?

The object is moving at a constant velocity.

**5.** The initial upward section on graph D represents an object doing what?

The object is moving farther and farther away from some starting point at a constant velocity.

**6.** The initial upward section on graph A represents an object doing what?

The object is accelerating, meaning the object is increasing its speed. Its acceleration is constant.

**7.** What are the units of the slope of graph A?

m/s2

**8.** What are the units of the slope of graph B?

m/s3

**9.** What are the units of the slope of graph C?

1/s or s-1 or Hz

**10.** What are the units of the slope of graph D?

m/s

**11.** The downward section on graph A that passes through the x-axis represents an object doing what?

The object slows down until a complete halt, and then proceeds to speed up in reverse.

**12.** The downward section on graph D that passes through the x-axis represents an object doing what?

The object is returning towards the starting position, and then passes it up.