

## Part 1: Speeding Up

1.

$$\vec{a} = \frac{d\vec{v}}{dt} \quad (1)$$

Acceleration is the derivative of velocity; the rate of change of the

2.

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3.

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4.

If the initial mass is doubled, the acceleration will be doubled.

5.

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## Part : loing Don

6.

The acceleration could be negative.

1.

The acceleration could be doubled if the weight is doubled.