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# Kinematics II

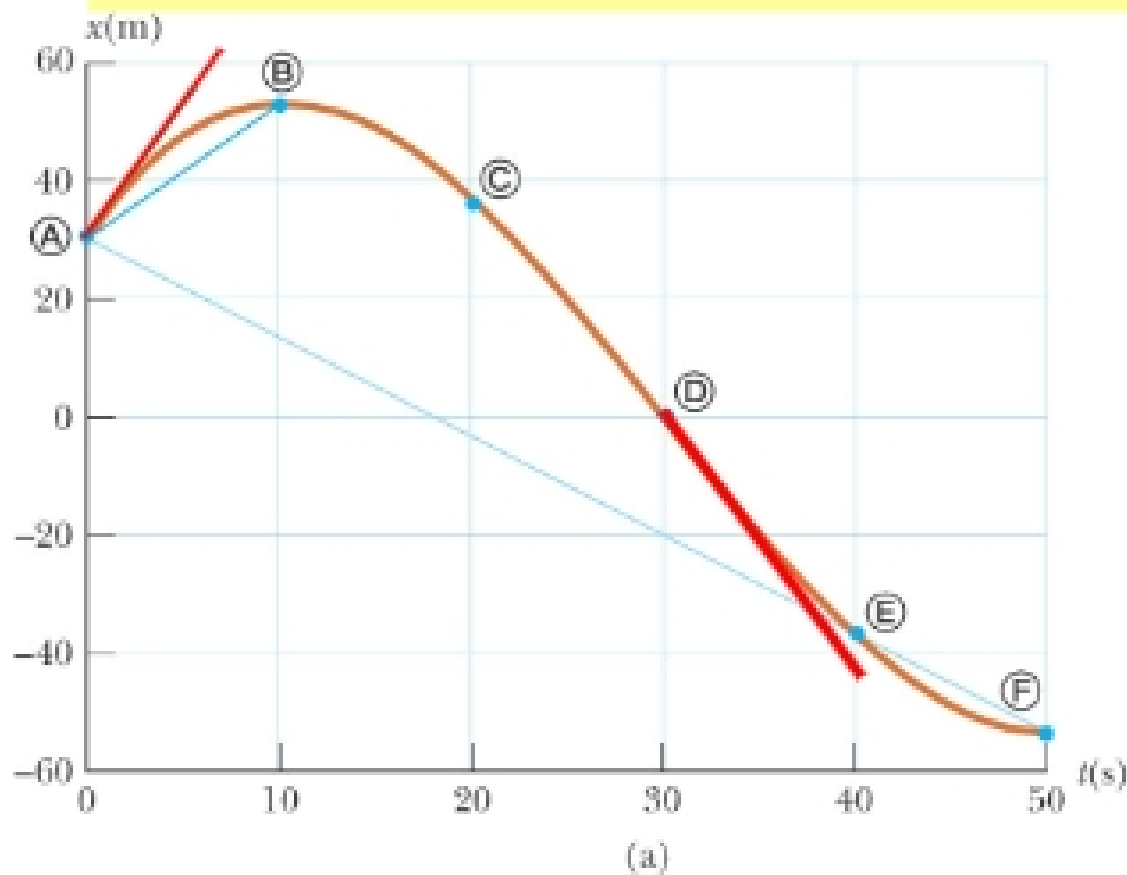
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# Remember this graph?

A:

$$v = \frac{60m - 30m}{8 \text{ sec}} = \frac{30m}{8s} = 3.75m/s$$



D:

$$v = \frac{0m - 45m}{10s} = -4.5m/s$$

WHAT ABOUT "B"??

# Conclusion

- Velocity is not the same at all times.
- It is changing
- A changing velocity is called an acceleration.

$$a_{average} = \frac{v_{final} - v_{initial}}{t} = \frac{\Delta v}{\Delta t}$$

$$a = \frac{dv}{dt}$$