

§4.1: DETERMINING DISTANCE TRAVELED FROM VELOCITY

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ANNOUNCEMENTS

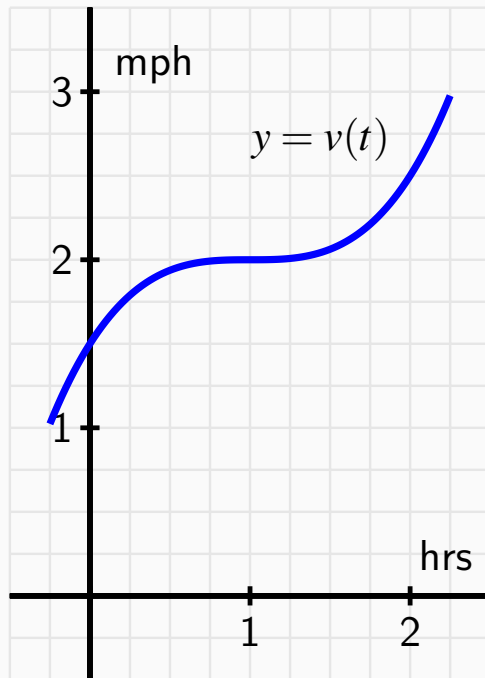
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PREVIEW ACTIVITY DISCUSSION

THE UPSHOT

The area under our (positive) velocity function $v(t)$ from $t = a$ to $t = b$ gives the distance the object travels from $t = a$ to $t = b$.

ACTIVITY 4.1.2



TAKEAWAY

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Alternative approach (at least in certain circumstances): find an **antiderivative**: if g and G are functions such that $G' = g$, we say G is an antiderivative of g .

ACTIVITY 4.1.3

NEGATIVE VELOCITY

The sign of the velocity describes the (1-dimensional) *direction*: forward and backward.

ACTIVITY 4.1.4

