CONCEPT: CONCEPTUAL PROBLEMS WITH VELOCITY-TIME GRAPHS

● You'll need to interpret velocity-time graphs to solve conceptual questions about position, velocity & acceleration.

EXAMPLE: The figure shows the velocity graph for a moving box. At which lettered point(s):

1) is the box moving forwards?

2) is the box moving backwards?

3) is the box at rest?

4) is the box turning around?

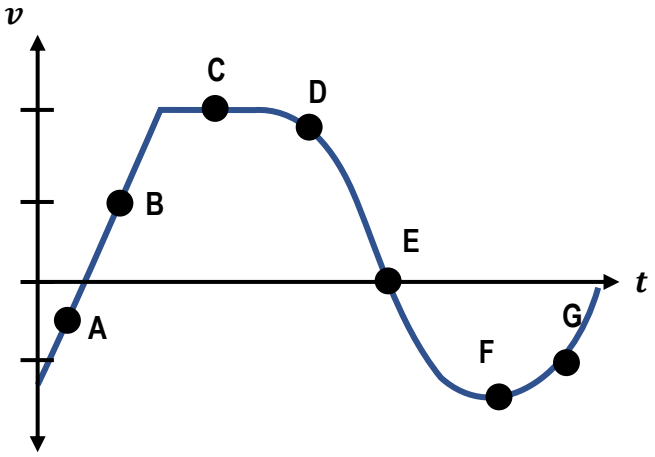
5) is the box's acceleration positive?

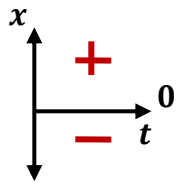
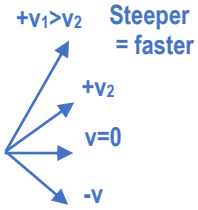
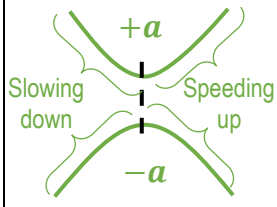
6) is the box's acceleration negative?

7) is the box accelerating the fastest?

8) is the box speeding up?

STEPS
1) Identify Variable: **[Position | Velocity (Speed) | Accel.]**
2) Identify Graph Feature: **[Value | Slope | Curvature]**
3) Identify Qualifier: **[+ | - | 0 | Up | Down | Sign Change | max. | min.]**
4) Interpret from Graph



	Position (x) (or Displacement)	Velocity (v) (or Speed)	Acceleration (a)
X-T	Value	Slope	Curvature
			
V-T	Area	Value	Slope