

## Graphing Practice Booklet 2: Revenge of the Graph Graph A

- 1. Which object travelled further?
- 2. Which object has a greater final speed?
- 3. Which object accelerated more quickly?
- 4. If Object A is accelerating at a rate of 0.01 m/s<sup>2</sup>, what is the approximate rate of acceleration of Object B?
- 5. Determine the average speed of each object.



1. Is this object speeding up or slowing down? How can you tell?

- 2. Determine the object's speed at between 0 and 2.0 s and 6.0 s and 10.0 s.
- 3. How would this graph look different if the object was moving at a constant speed?
- 4. How far does the object travel in 4.0 s? How far does it travel in 8.0 s?



Two cars are driving through the city in rush hour traffic. Compare the journey of Car A and Car B along the same stretch of road at different times.

- 1. List the intervals when each car is speeding up.
- 2. List the intervals when each car is slowing down.
- 3. List the intervals when each car is travelling at a constant speed.
- 4. Which car reached a faster top speed? What speed?
- 5. Which car sped up the fastest? What was the average acceleration for this interval? (Units are km/h/s.)

- 6. What is the average acceleration for Car A in the first 30 seconds?
- 7. What is the average acceleration for Car B for the last 30 seconds (20 to 50 seconds)?
- 8. What is the average acceleration for an interval when the line is horizontal? What does that mean?
- 9. For one of the cars, write a short explanation of its trip. Remember that it all happened in less than one minute!