

- 2 Cars are traveling in parallel lanes on the highway.
- Car A's position is given by  $s_A(t) = 15t^2 + 10t + 20$
- Car B's position is given by  $s_B(t) = 5t^2 + 40t$
- Assuming that  $t \geq 0$ ,
  - How far ahead is Car A at time 0?
  - At what instant of time are the cars next to each other?
  - At what instant of time do they cars have the same velocity?
    - Which car is ahead at this instant?