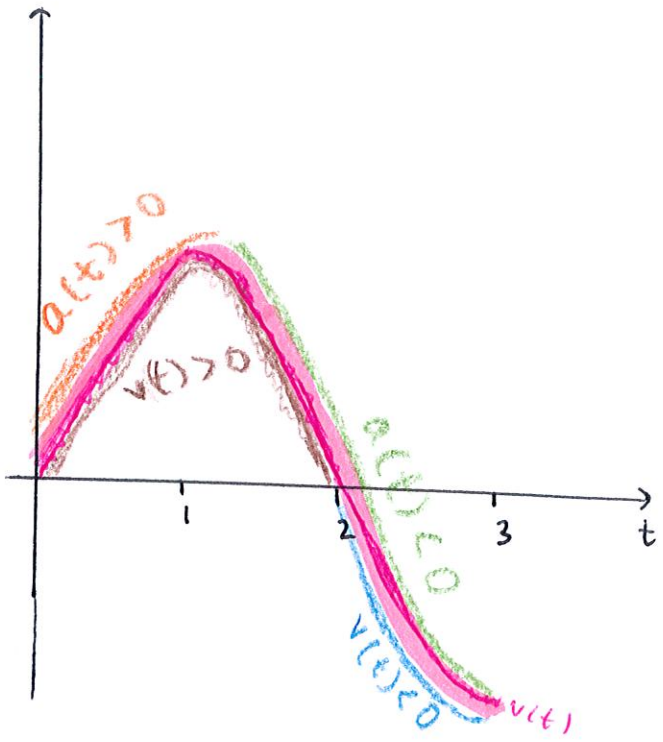
5. a.

$v(t)$ =



Speeding up:

(0, 1) (2, 3) { where velocity & acceleration are both >0 or both <0

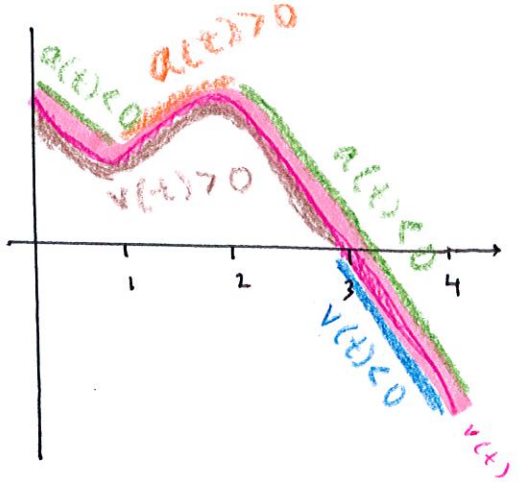
slowing down:

(1, 2) { where velocity & acceleration have different signs

---

b.

$v(t)$ =



speeding up:

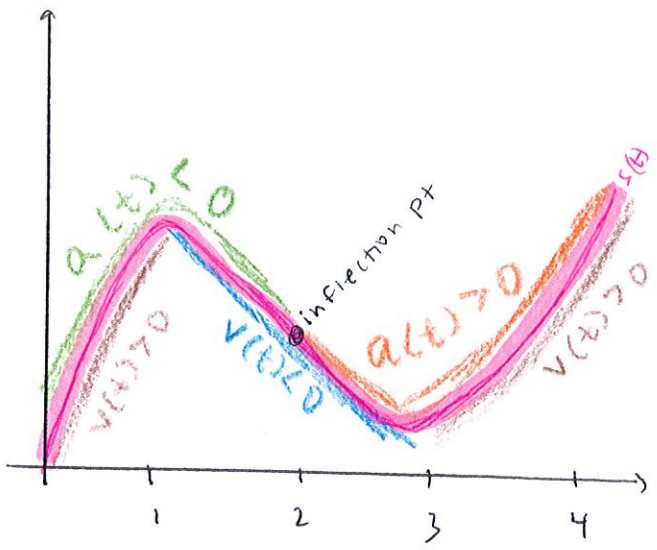
(1, 2) (3, 4) { where velocity & acceleration are both >0 or both <0

slowing down:

(0, 1) (2, 3) { where velocity & acceleration have different signs

6. a.

$s(t)$ =



speeding up:

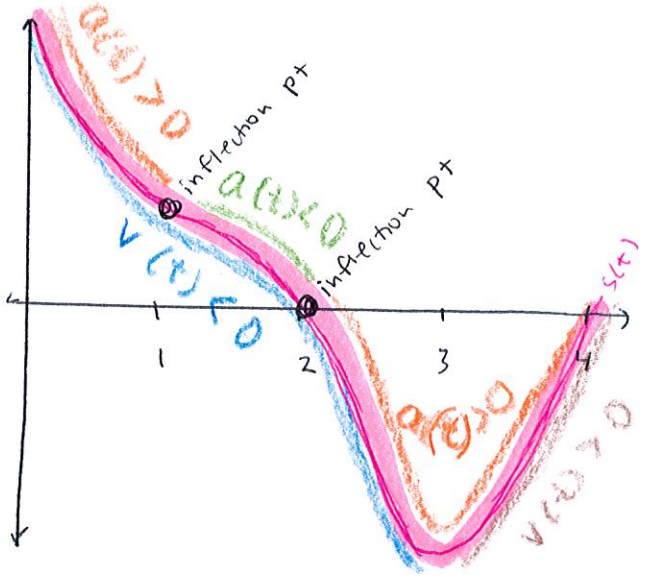
(1, 2) (3, 4) { where velocity & acceleration have same signs

slowing down:

(0, 1) (2, 3) { where velocity & acceleration have different signs

---

b. $s(t)$ =



speeding up:

(1, 2) (3, 4) { where velocity & acceleration have same signs

slowing down:

(0, 1) (2, 3) { where velocity & acceleration have different signs