

1. Suppose that you are running a race, and that  $f(t)$  represents your distance from the finish line at time  $t$ .
  - a) Sketch a possible graph of  $f$ .
  - b) Suppose that your friend also ran the race, and that  $g(t)$  represents his distance from the finish line at time  $t$ . Sketch on the same axes a possible graph of  $g$  assuming that your friend won the race.
2. Sketch a graph satisfying the following properties:
  - a) The domain is  $[0, 3) \cup (3, 4] \cup (5, 6]$ .
  - b) The range is  $[-4, -1] \cup (0, 5]$ .