



Activity 2.1 – Derivatives of Quadratic Functions

- 19.4 ft/s
 - 20.84 ft/s
 - 20.984 ft/s
 - 21 ft/s
 - $v(t) = 85 - 32t$; $v(2) = 21$ ft/s.
 - $a(t) = -32$ ft/s²
- $f'(x) = 4x - 10$; $f''(x) = 4$
 - $y'(w) = -1 + w$; $y''(w) = 1$
 - $h'(r) = 32r - 24$; $h''(r) = 32$
- $P'(t) = 8t + 34$ bacteria per hour; $P'(2) = 50$ bacteria per hour
- $f(4) = 5$
 - $f'(4) = -2$
 - $y - 5 = -2(x - 4)$