

$$h = 0.5 + 32t - 4.9t^2$$

$$h = 0$$

$$0 = 0.5 + 32t - 4.9t^2$$

$$0 = -4.9t^2 + 32t + 0.5$$

$$t \approx 6.5 \text{ seconds}$$

$$\frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$$

$$2a$$

$$\frac{-32 \pm \sqrt{32^2 - 4(-4.9)(0.5)}}{2(-4.9)} = t$$

$$2(-4.9)$$

$$\frac{-32 \pm \sqrt{1033.8}}{-9.8}$$

$$-9.8$$

$$t = 6.5462...$$