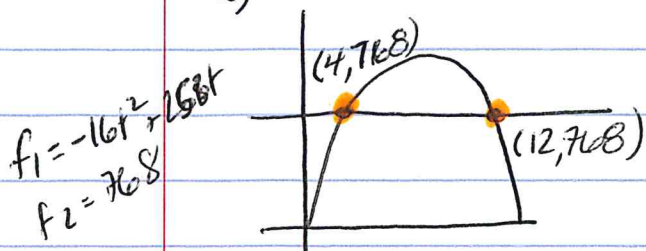


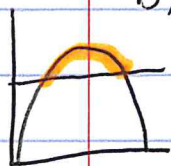
$$A = -16t^2 + V_0t + A_0$$

33 a) If $V_0 = 256 \text{ ft/sec}$ and $A = 768$, find t

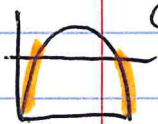


The projectile will be 768 ft above ground twice, at 4 sec (on the way up) and at 12 sec (on the way down)

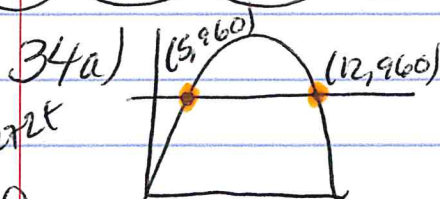
b) (same pic) ↑



The projectile will be at least 768 ft off the ground at 4 seconds through 12 seconds. $[4, 12]$ 4+12 are included



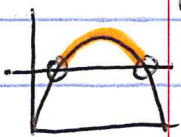
c) The projectile will be less than or = to 768 off the ground from 0-4 sec and from 12-16 sec. 4+12 are included



$f_1 = -16t^2 + 272t$
 $f_2 = 960$

a) The projectile will be 960 ft above ground twice, at 5 sec and at 12 sec

b) The projectile will be more than 960 ft above ground after 5 seconds, but before 12 sec. $(5, 12)$ ← 5+12 not included



c) The projectile will be at or under 960 ft at 0-5 seconds and 12-17 sec. ‡



5+12 are included