



Team Name _____ Team # _____

Your names _____

20170204 (answer sheet) – Huntley Invitational

1. b, c, and d	10. a) Up b) 5.0 cm c) 5.0 J
2. $(-6.26i - 3.23j)$ N	11. a) 32 J b) 8 W c) 78°
3. a) F_2 and F_3 are in the $-x$ direction, $a = 0$; b) F_2 and F_3 are in the $-x$ direction, a is 0.83 m/s^2 in the x direction c) F_2 and F_3 are at 34° from $-x$ direction	12. pilot
4. a) 0.74 m/s^2 b) 7.3 m/s^2	13. Saunders-Roe (later British Hovercraft Corporation (BHC), then Westland)
5. $T_1 = 13 \text{ N}$, $T_2 = 20 \text{ N}$, $a = 3.2 \text{ m/s}^2$	14. annular ring
6. a) 0.0338 N b) 9.77 N	15. a) 6.4 m^3 b) 5.4 m/s c) $9.8 \times 10^4 \text{ Pa}$
7. a) 73 ft b) 7.6° c) 1.0 s	16. 40 m/s
8. 5000 J	17. a) Yes. $H - h$ b) $H/2$
9. 25 J	18. $5.4 \text{ ft}^3/\text{s}$