Extra Second Law Problems Answers only

23. 1410 N

24. a) Fnet = 19.0 N @ 237.5 and a = 0.704 m/s2 @ 237.5

 b) Fnet = 14.0 N @ 51.0 and a = 0.519 m/s2 @ 51.0

25. a) T1 = 62.8 N T2 = 31.4 N

 b) T1 = 73.0 N T2 36.5 N

26. a) b) f = 62.2 N c) R = 199.5 N d) F = 99.6 N

R

f

mg

F

Fx

Fy

27. FB = 6894 N Fnet = 8863 N

28. 2

29. a) 319 N b) 1.48 m/s2

30. a) 4.15 m/s2 b) 1.33 m/s

31. $a=\left(\frac{m\_{A}}{m\_{A}+m\_{B}}\right)g$ T = mAa

32. 25.5