Universidade Federal de Santa Catarina Prof. Rafael Heleno Campos Gabarito lista de exercícios 2 - Mecânica

1. (a)
$$F = 2,4N$$

(b)
$$F = 3,6N$$

2. (a)
$$P_T = 6\bar{9}0N$$

(b)
$$P_L = 1\bar{2}0N$$

(c)
$$P_J = 1\bar{8}00N$$

3. (a)
$$F_F = 3\bar{5}00N$$

(b)
$$t = 5, 9s$$

4.
$$F_a t = 0,25N$$

5. (a)
$$F = 6.9 \times 10^5 N$$

(b)
$$F = 2,4 \times 10^6 N$$

6. (a)
$$T = 4.5 \times 10^4 N$$
 ou $T = 5 \times 10^4 N$

(b)
$$T = 3, 2 \times 10^4 N$$
 ou $T = 3 \times 10^4 N$

8.
$$F_a t = \bar{1}0N$$

(b)
$$F = 70N$$

(c)
$$F = 55N$$

(d)
$$F = 86N$$

(e)
$$F = \bar{5}0N$$

11.
$$d = 40m$$

12.
$$F = \bar{3}00N$$

13.
$$W = 38J$$

14.

15.
$$E_C = 3 \times 10^{14} J$$

16.
$$h = 0,26m$$

17.
$$\Delta x = 0,12m$$

18. (a)
$$v = 5,7m/s$$

(b)
$$v = 7, 2m/s$$

19. (a)
$$m = 5\bar{0}00kg$$

(b)
$$p = 5,0 \times 10^4 kg.m/s$$

20.
$$p = 2\bar{5}00kg.m/s$$
 e $E_C = 6, 2 \times 10^5 J$