

Gabarito Lista 1 – Mecânica Geral I

- 2.2. $F = 10,47 \text{ kN}$ $\theta = 17,54^\circ$
- 2.6. $F_v = 259,8 \text{ lb}$ $F_u = -150 \text{ lb}$
- 2.10. $F_R = 10,4 \text{ kN}$ $\theta = 54,9^\circ$
- 2.13. $F_{x'} = -182,8 \text{ N}$ $F_y = 343,5 \text{ N}$
- 2.26. $F_A = 3,66 \text{ kN}$ $F_B = 7,07 \text{ kN}$
- 2.39. $F_l = 274,7 \text{ N}$ $\theta = 29,1^\circ$
- 2.48. $F = 1,23 \text{ kN}$ $\theta = 6,08^\circ$
- 2.64. $F = 774,3 \text{ N}$ $F_y = 387,3 \text{ N}$ $\alpha = 112,8^\circ$ $\gamma = 39,2^\circ$
- 2.65. $F_2 = 66,4 \text{ N}$ $\alpha = 59,79^\circ$ $\beta = 106,88^\circ$ $\gamma = 144,48^\circ$
- 2.68. $F_R = \{90\mathbf{i} - 113,28\mathbf{j} + 42\mathbf{k}\} \text{ lb}$
- 2.81. $F_x = 1,28 \text{ kN}$ $F_y = 2,6 \text{ kN}$ $F_z = 0,78 \text{ kN}$
- 2.83. $F_3 = 165,62 \text{ N}$ $\alpha = 97,48^\circ$ $\beta = 63,66^\circ$ $\gamma = 27,54^\circ$
- 2.86. $r_{AB} = \{-3\mathbf{i} + 6\mathbf{j} + 2\mathbf{k}\} \text{ m}$ $L = 7 \text{ m}$
- 2.94. $F_A = F_B = F_C = 52,1 \text{ lb}$
- 2.96. $\alpha = 77,6^\circ$ $\beta = 90,6^\circ$ $\gamma = 167,6^\circ$
- 2.98. $F_A = \{-43,5\mathbf{i} + 174\mathbf{j} - 174\mathbf{k}\} \text{ N}$ $F_B = \{53,2\mathbf{i} - 79,8\mathbf{j} - 146,4\mathbf{k}\} \text{ N}$
- 2.119. $F_1 = 333,33 \text{ N}$ $F_2 = 372,68 \text{ N}$
- 2.141. $F_v = 98,7 \text{ N}$ $F_u = 185,6 \text{ N}$
- 2.143. $F_B = \{-324\mathbf{i} + 130\mathbf{j} + 195\mathbf{k}\} \text{ N}$ $F_C = \{-324\mathbf{i} - 130\mathbf{j} + 195\mathbf{k}\} \text{ N}$
 $F_E = \{-194\mathbf{i} + 0\mathbf{j} + 291\mathbf{k}\} \text{ N}$