Practice Problem Set 9: Engineering Mechanics (NMEC101)
Answers

1. $\theta = 0^o, 69.8^o, 180^o$

2. (a) $v_\theta = 0.45\frac{m}{s}$, (b) $a_r = 2.5\frac{m}{s^2}, a_\theta = 0, (c)$ $a_{rel} = 2.84\frac{m}{s^2}$

3. $(a)v_{B/A} = 3.69\frac{m}{s}, (b)v_A = 1.196\ \frac{m}{s}$

4. (a) $v_{block/arm} = -1.226\frac{m}{s}, (b)a_{block/arm} = 10.89\frac{m}{s^2}$