

Name: _____

Class #: _____

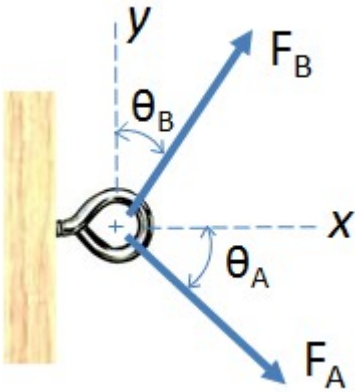
Instructor: Parker Schnepf

Class: _____

Section #: _____

Assignment: 1.2 Homework Exercises

Question 1: (10 points)

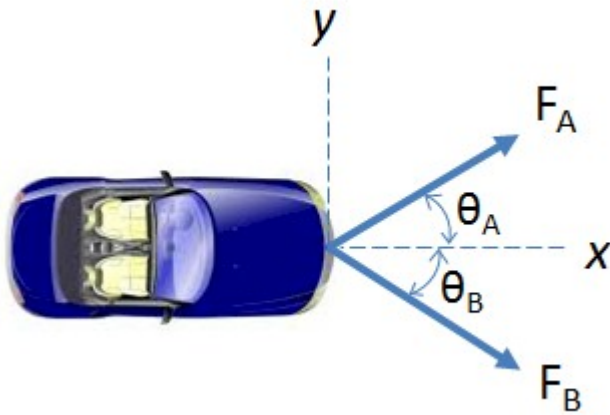


Find the magnitude of the resultant force on the eye bolt and its direction measured *counterclockwise* from the positive x-axis, given:

$$F_A = 10 \text{ N}, \theta_A = 50^\circ, F_B = 5 \text{ N}, \theta_B = 35^\circ$$

$$(\text{ans: } F_R = 9.96 \text{ N}, \theta_R = -21^\circ)$$

Select problem completion status from drop-down list:

Question 2: (10 points)

Ropes F_A and F_B are used to tow the truck as shown. Find the magnitude of the forces in the ropes if the resultant force is directed along the positive x-axis, given:

$$F_R = 925 \text{ N}, \theta_A = 40^\circ, \theta_B = 75^\circ$$

(ans: $F_A = 986 \text{ N}$, $F_B = 656 \text{ N}$)

Select problem completion status from drop-down list:
