

Due Date: 21st September 2012 (In class)

Problem 1 (Problem 2.7)

Two forces are applied as shown to a hook support. Knowing that the magnitude of **P** is 35 N, determine by trigonometry:

- (a) the required angle α if the resultant **R** of the two forces applied to the support is to be horizontal
- (b) the corresponding magnitude of **R**.

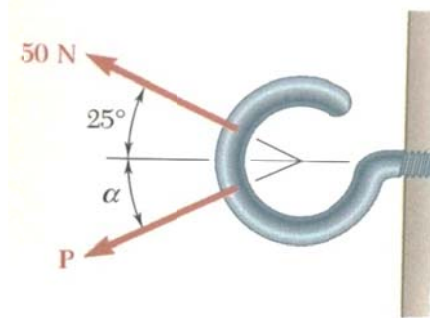


Fig. 1

Problem 2 (Problem 2.23)

Determine the *x* and *y* components of the force shown.

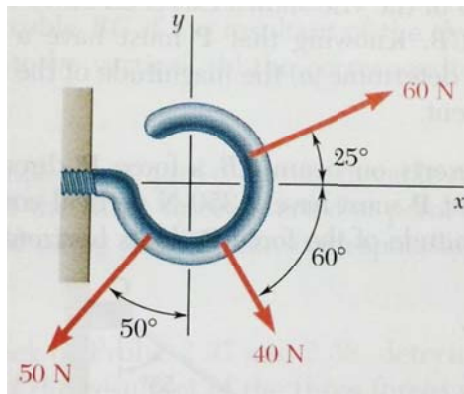


Fig. 2

Problem 3 (Problem 2.32)

Determine the resultant of the three forces.

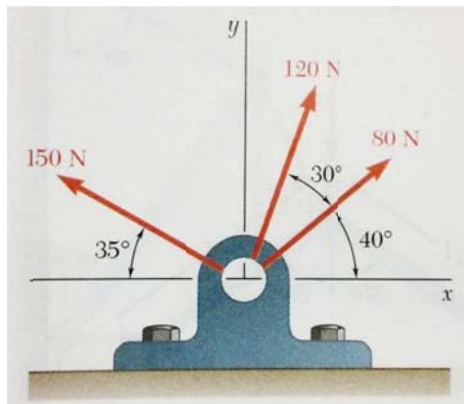


Fig. 3