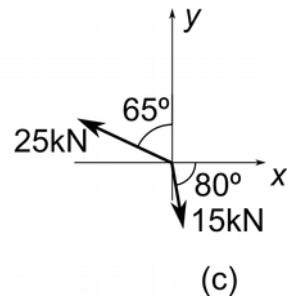
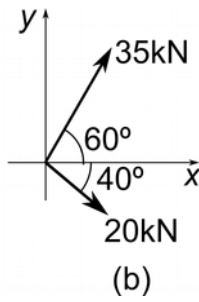
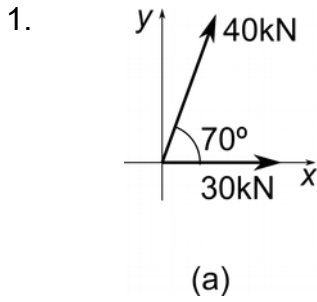


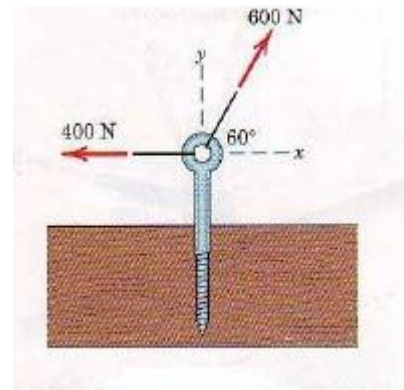
Forces – 2 – Practice



For each of the diagrams a, b, c, calculate the size and direction (relative to the +ve x-axis) of the resultant of the two forces. (58kN , 41° ; 37kN , 28° ; 20kN , 192°)

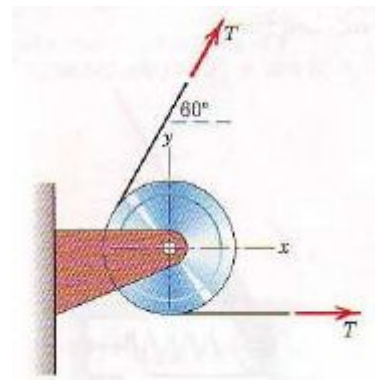
2. Calculate the resultant (size and direction) of the two forces acting on the screw eye.

(529N , 101° anticlockwise from x-axis)



3. The tension, T , in the pulley cable is 400N . Calculate the size of the resultant force exerted on the pulley and the angle it makes with the x-axis.

(693N , 30° above x-axis)



4. A belt is driven by a pulley. The tensions in the two parts of the belt are 60N and 80N , as shown in the diagram.

Calculate the magnitude and direction of the total force exerted on the pulley by the belt.

(133N , 25° above horizontal)

