



A vector diagram illustrating the addition of three forces. Vector \vec{F}_1 is a horizontal blue arrow pointing right. Vector \vec{F}_2 is a blue arrow pointing down and to the right, starting from the tip of \vec{F}_1 . Vector \vec{F}_3 is a blue arrow pointing down and to the left, starting from the tip of \vec{F}_2 and ending at the tip of \vec{F}_1 . A dashed red arrow, labeled 'Resultant', starts from the tail of \vec{F}_1 and ends at the tip of \vec{F}_3 , representing the sum of the three vectors.

$$\vec{F}_1 = 4\text{ N}$$

$$\vec{F}_2 = 5.31\text{ N}$$

$$\text{Resultant} = 11.51\text{ N}$$

$$\vec{F}_3 = 3.35\text{ N}$$