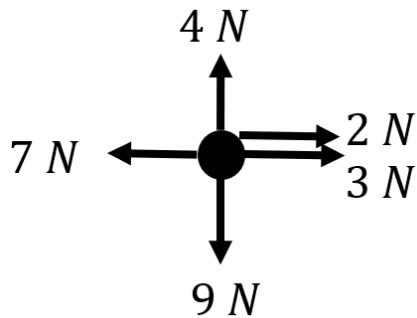
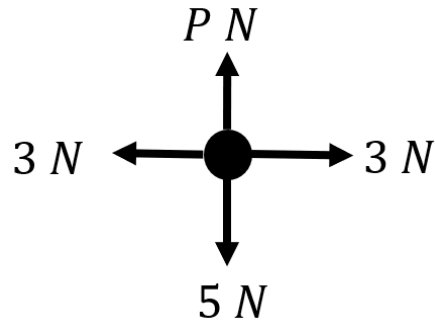


## 10.1) Force diagrams

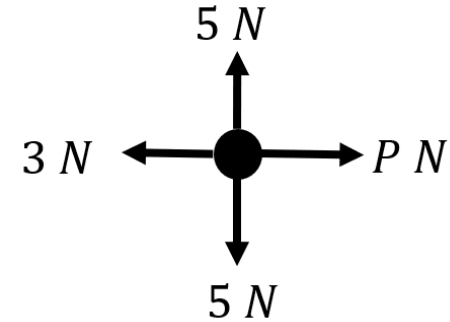
## Worked example

Draw a force diagram to represent the resultant force:

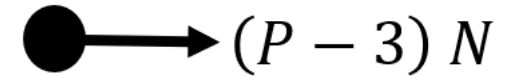


## Your turn

Draw a force diagram to represent the resultant force:

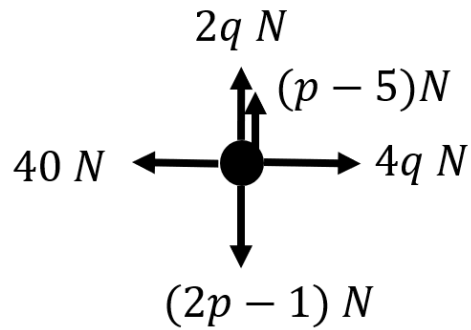


$$R(\uparrow): 0\text{ N}$$
$$R(\rightarrow): (P - 3)\text{ N}$$



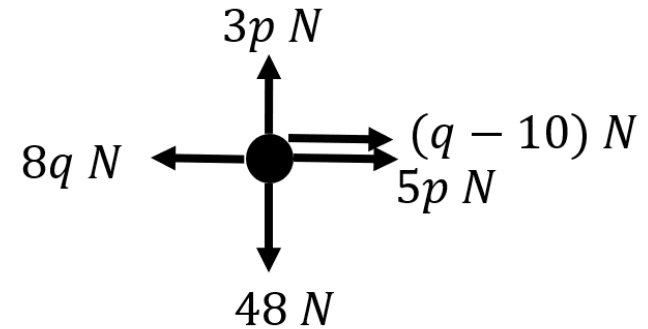
## Worked example

A particle is acted on by a set of forces.  
Given that the particle is at rest, find the values of  $p$  and  $q$



## Your turn

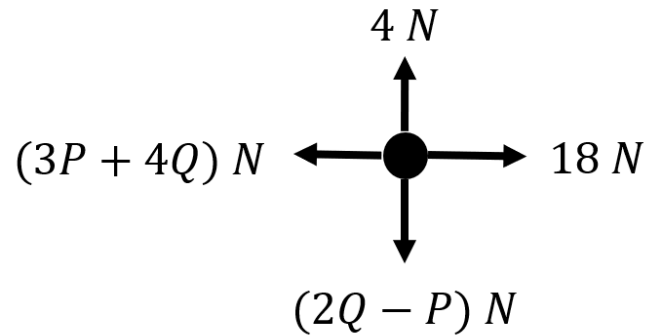
A particle is acted on by a set of forces.  
Given that the particle is at rest, find the values of  $p$  and  $q$



$$p = 16, q = 10$$

## Worked example

Given that the particle is moving with constant velocity, find the values of  $P$  and  $Q$



## Your turn

Given that the particle is moving with constant velocity, find the values of  $P$  and  $Q$

