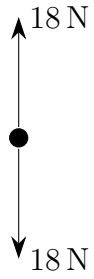
Name: Date: Period:

Net Force Practice

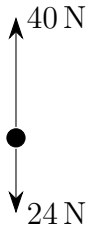
1. In each of the free-body diagrams below, calculate the **magnitude** and **direction** of the net force and draw it.

(a)



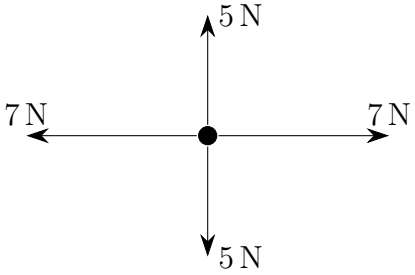
F_{NET} = _____ N, _____

(b)



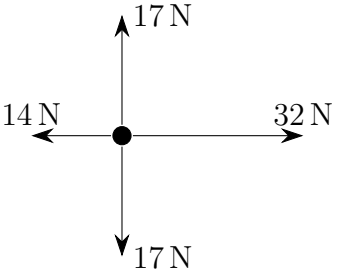
F_{NET} = _____ N, _____

(c)



F_{NET} = _____ N, _____

(d)



F_{NET} = _____ N, _____

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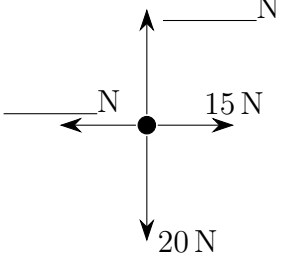
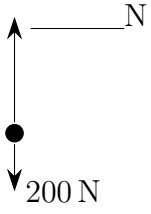
2. In each of the free-body diagrams below, the net force is given, but one or more of the applied forces is missing. Find the missing forces.

(a)



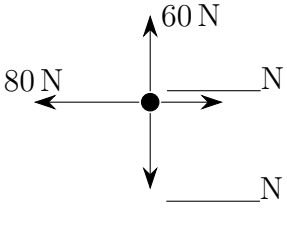
$F_{NET} = 0\,\text{N}$

(b)



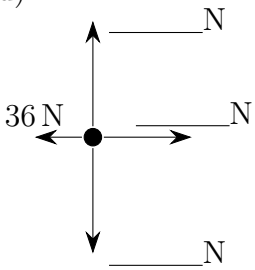
$F_{NET} = 150\,\text{N}$, up

(c)



$F_{NET} = 45\,\text{N}$, left

(d)

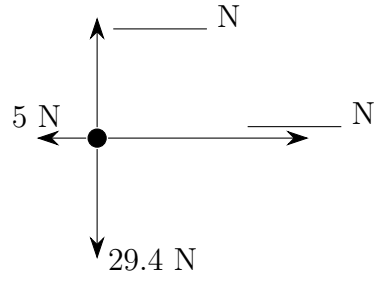


$F_{NET} = 23\,\text{N}$, right

Name: Date: Period:

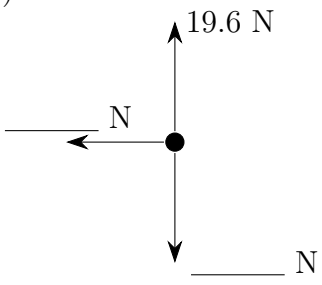
3. Fill in the blanks in each of the situations depicted below. Draw the net force.

(a)



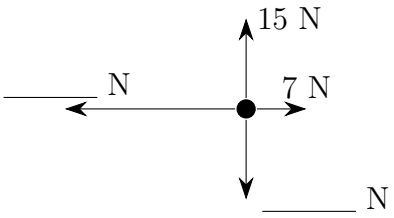
F_{NET} = 23 N, right

(b)



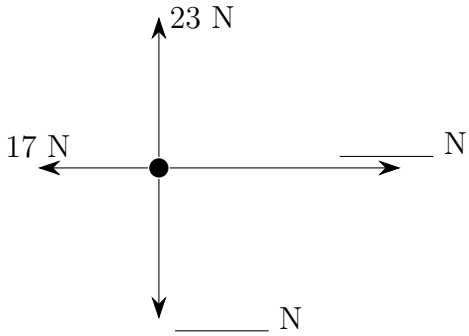
F_{NET} = 16 N, left

(c)



F_{NET} = 60 N, left

(d)



F_{NET} = 54 N, right

4. In your own words, explain how you find the *net force*.