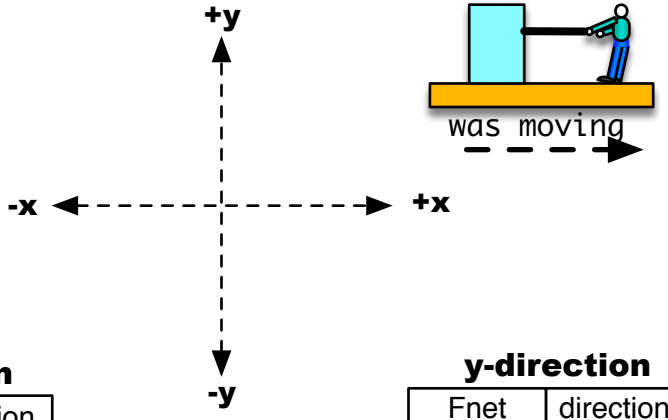
Cycle 3 Forces & FBDs

X & Y Forces A

The box weighing 500 N is being pulled by a tension force of 300 N. There is 100 N of friction holding it back.



x-direction

Fnet	direction

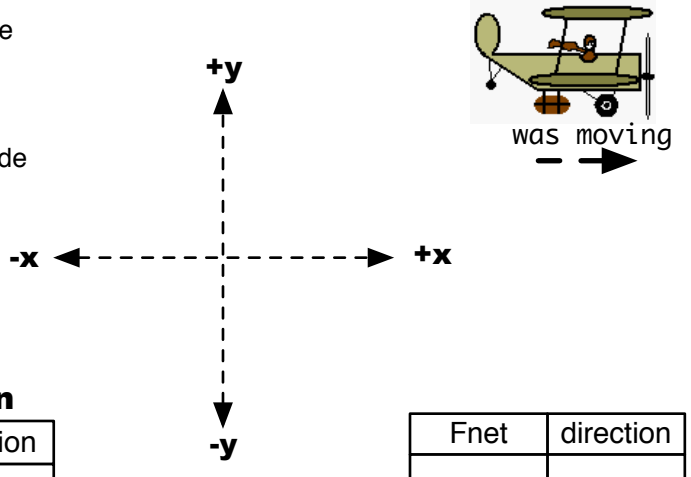
- ☐ gaining speed.
- ☐ constant speed.
- ☐ losing speed.

y-direction

Fnet	direction

- ☐ gaining speed.
- ☐ constant speed.
- ☐ losing speed.

The 900 kg plane is flying to the right. The propeller provides 5,000 N of thrust against 6,000 N of drag.The wings provide 7,000 N of lift.



x-direction

Fnet	direction

- ☐ gaining speed.
- ☐ constant speed.
- ☐ losing speed.

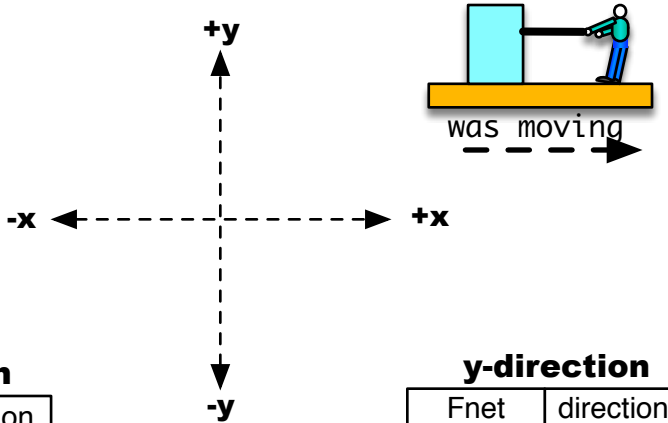
Fnet	direction

- ☐ gaining speed.
- ☐ constant speed.
- ☐ losing speed.

Cycle 3 Forces & FBDs

X & Y Forces B

The 80 kg box is pulled by a tension force of 200 N. There is 300 N of friction holding it back.



x-direction

Fnet	direction

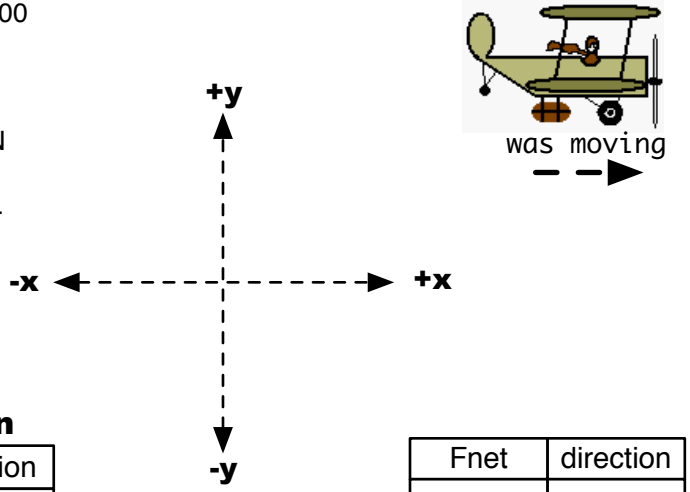
- ☐ gaining speed.
- ☐ constant speed.
- ☐ losing speed.

y-direction

Fnet	direction

- ☐ gaining speed.
- ☐ constant speed.
- ☐ losing speed.

The plane weighs 8,000 N and is flying to the right. The propeller provides 7,000 N of thrust against 5,000 N of drag.The wings provide 7,000 N of lift.



x-direction

Fnet	direction

- ☐ gaining speed.
- ☐ constant speed.
- ☐ losing speed.

Fnet	direction

- ☐ gaining speed.
- ☐ constant speed.
- ☐ losing speed.