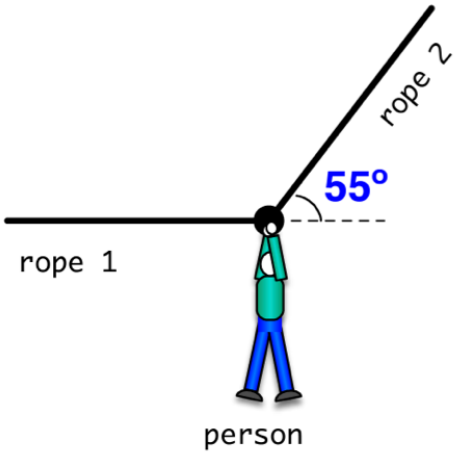
Cycle 4 – Advanced Components

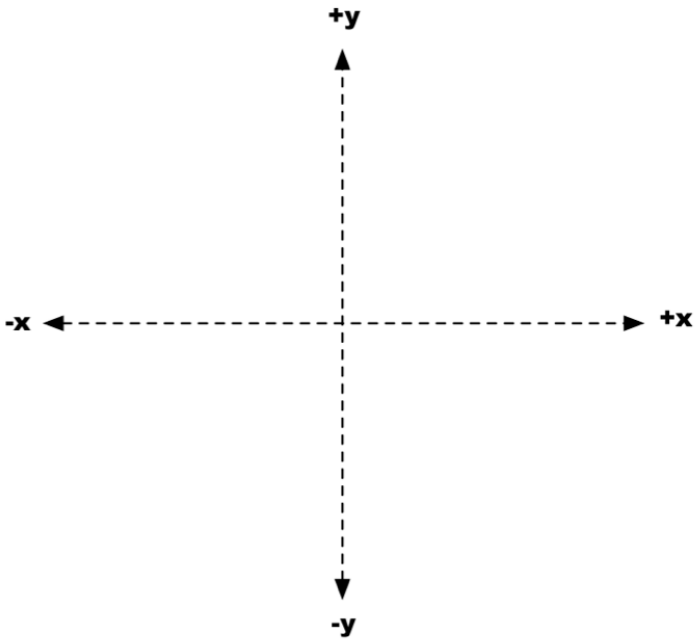
Check-in #2

Name: _____

The person is at rest and staying at rest, and not touching the ground.

The tension in rope 2 is 900 N.
a) Draw the forces on the diagram.
b) Determine the tension in rope 1 and the weight of the person.





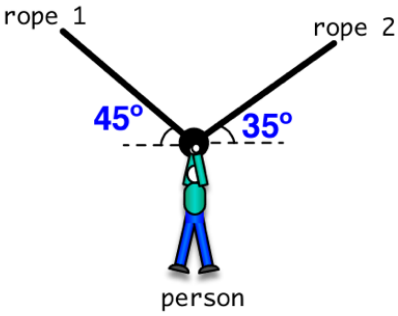
X Net Force	Y Net Force

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

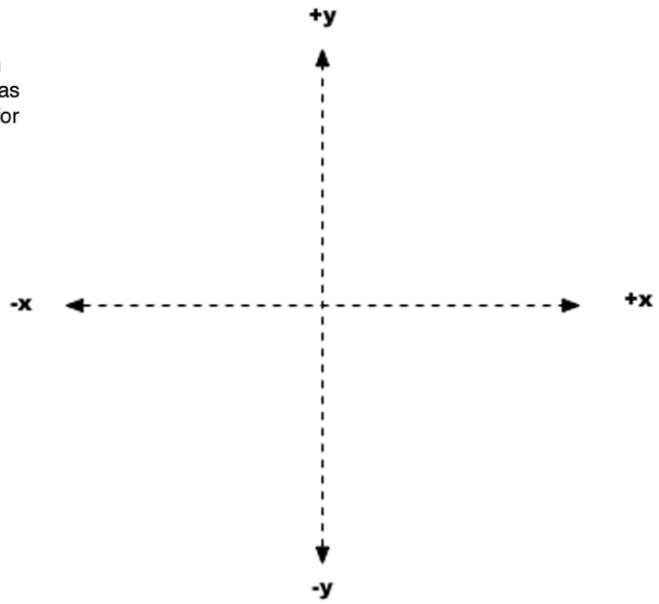
- ☐ gaining speed.
- ☐ constant speed.
- ☐ losing speed.

Cycle 4 – Advanced Components

Check-in #2



The person starts at rest and is not touching the ground.
The tension in rope 1 is 800 N. The tension in rope 2 is 700 N. The person weighs 900 N, was at rest and is not touching the ground. Solve for the Net Forces.



X Net Force	Y Net Force

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

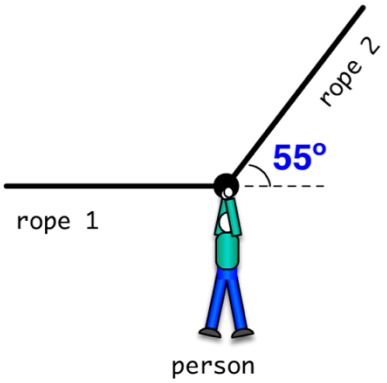
☐ gaining speed.
☐ constant speed.
☐ losing speed.

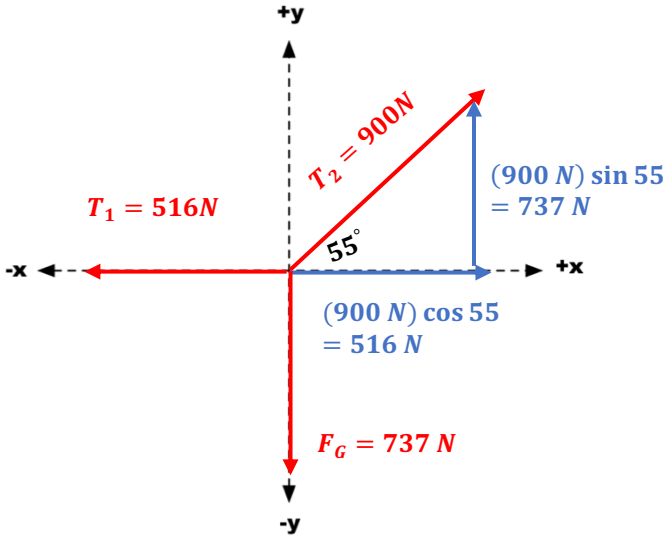
Name: _____

Advanced components of forces

The person is at rest and staying at rest, and not touching the ground.

The tension in rope 2 is 900 N.
a) Draw the forces on the diagram.
b) Determine the tension in rope 1 and the weight of the person.

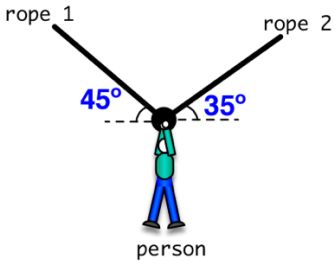




X Net Force	Y Net Force
0	0

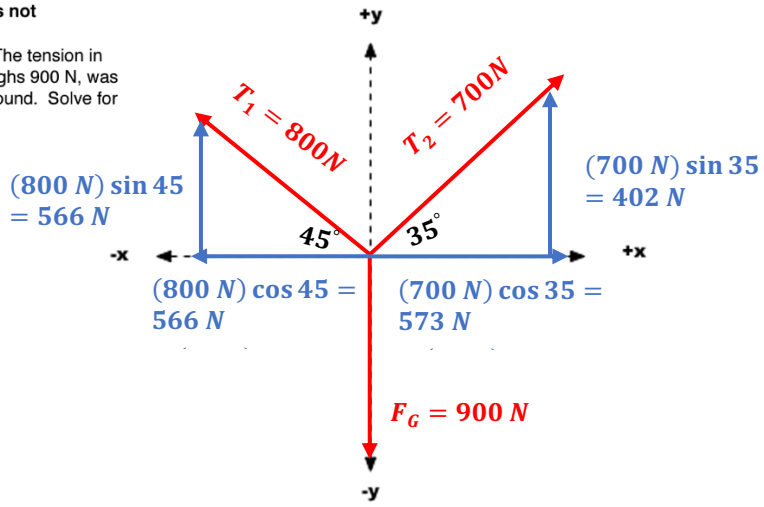
☐ gaining speed.	☐ gaining speed.
☒ constant speed.	☒ constant speed.
☐ losing speed.	☐ losing speed.

The Tension in rope 1 is 516 N, and the weight of the person is 737 N.



The person starts at rest and is not touching the ground.

The tension in rope 1 is 800 N. The tension in rope 2 is 700 N. The person weighs 900 N, was at rest and is not touching the ground. Solve for the Net Forces.



$$F_{Net,y} = 402\ N + 566\ N + (-900N) = +68\ N$$

$$F_{Net,x} = 573\ N + (-566\ N) = +7\ N$$

X Net Force
+7 N

- [x] gaining speed.
- [ ] constant speed.
- [ ] losing speed.

Y Net Force
+68 N

- [x] gaining speed.
- [ ] constant speed.
- [ ] losing speed.