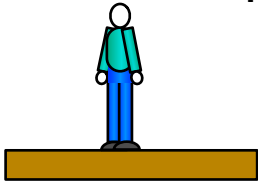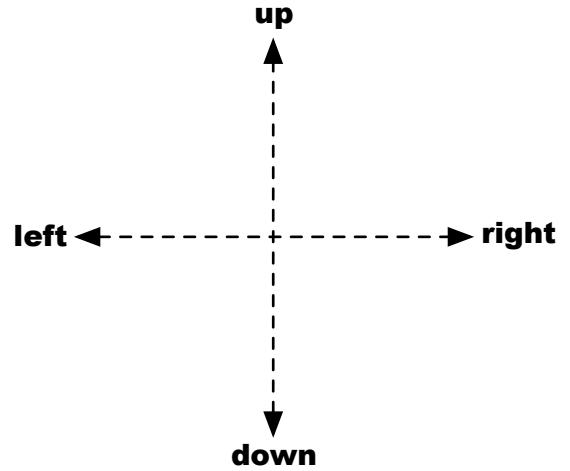# Weight & Surface 1
Fnet Practice

Name: _____

Complete the FORCE DIAGRAM with arrows and labels
Determine the AMOUNT and DIRECTION of the net force,
Then determine what will happen to the motion of the object

1. The man weighs 500 N, and the surface holds him up with an equal force. (The man was at **rest**.)

☐ Maintaining.
☐ Speeding up.
☐ Slowing down.

Fnet	direction

up

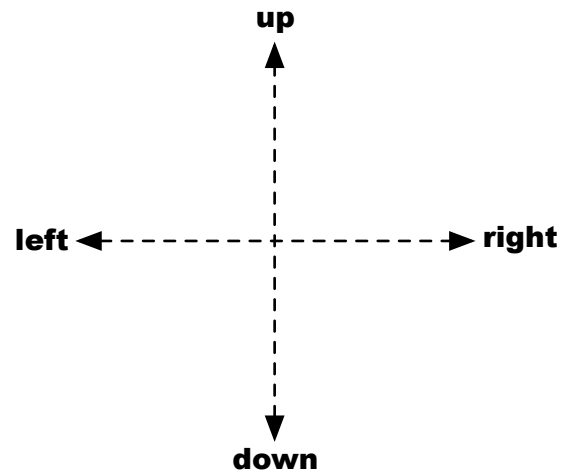left ← - - - - - - - - → right

down

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2. The man still weighs 500 N, but he is now lifted off the surface by 700 N of Tension from a rope. (The man was at **rest**.)

☐ Maintaining.
☐ Speeding up.
☐ Slowing down.

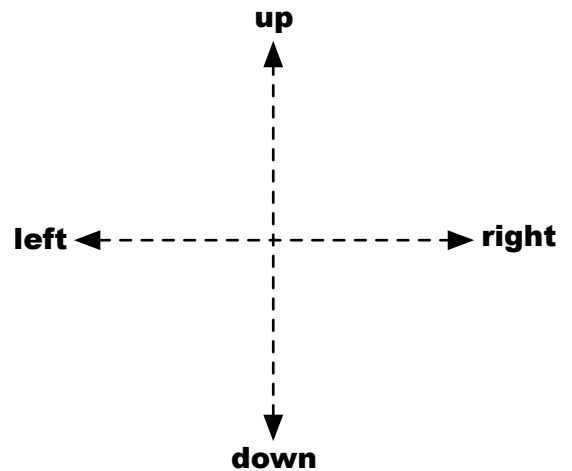| Fnet	direction

up

left ← - - - - - - - - → right

down

---

3. The man still weighs 500 N, but and the tension in the rope slackens a bit to be 500 N now. (The man was moving **upward**.)

☐ Maintaining.
☐ Speeding up.
☐ Slowing down.

Fnet	direction

up
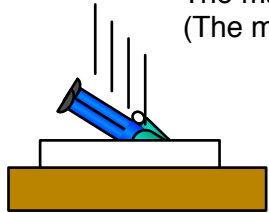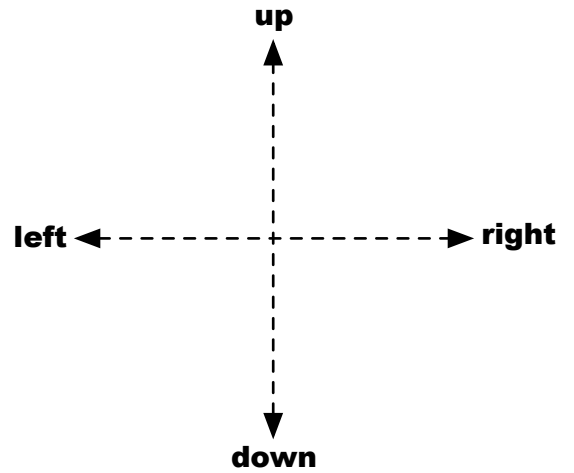
left ← - - - - - - - - → right

down

4. The man lets go of the rope. He still weighs 500 N, but now experiences 300 N of Drag as he falls.
(The man was moving **downward**.)

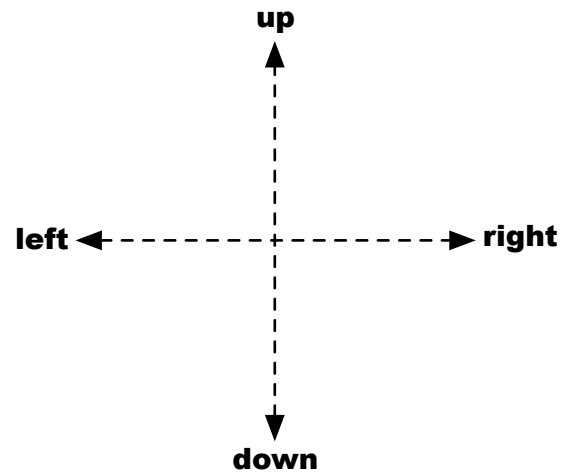□ Maintaining.
□ Speeding up.
□ Slowing down.

Fnet	direction

up

left ← - - - - - - - - - → right

down

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5. The man (who still weighs 500 N) falls into a mattress that someone thoughtfully put on the floor. The mattress provides a surface of 900 N.
(The man was moving **downward**.)

□ Maintaining.
□ Speeding up.
□ Slowing down.

Fnet	direction

up

left ← - - - - - - - - - → right

down

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6. TRICKY! A different man weighs 600 N. The net Force is given below. What is the tension in the rope?.
(The man was at **moving upward**.)

□ Maintaining.
□ Speeding up.
□ Slowing down.

Fnet	direction
100 N	down

up

left ← - - - - - - - - - → right

down