SPH 3U NAME: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

# INTRODUCTION TO FORCES

## WORKSHEET

1. Draw a free body diagram for the following
   1. a boy sits on a toboggan – not moving
   2. a boy sits on a toboggan and his dad is pulling it forward with a force of 40 N
   3. a boy sits on a toboggan and his dad is pulling it forward with a force of 40 N while the boy is dragging his hand in the snow giving the toboggan an opposing force of 5 N.
2. Determine the net force and state its value. 6 N

a. b.

6 N 8 N

4 N

3 N

1. d.

2 N 5 N 12 N

3 N 4 N 9 N

1. Two children are playing on the beach pulling on an inner tube. One exerts a force of 45 N [N]. The other exerts a force of 60 N [W]. What is the net force acting on the tube?