FPC 10
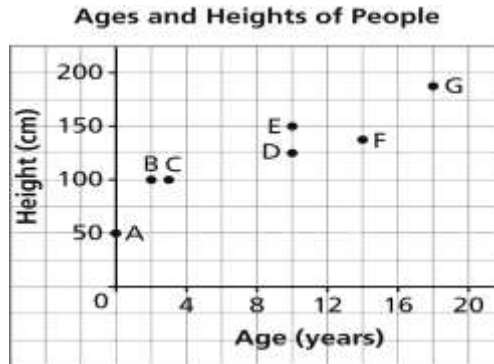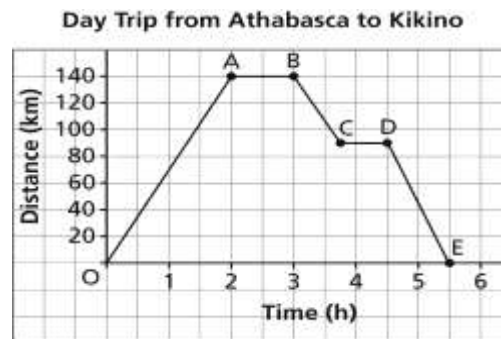## 4.3B – Reading & Sketching Graphs of "*Situations*"

1. Each point on this graph represents a person. Explain your answer to each question below.

Ages and Heights of People

   a) Which person is the oldest? What is her or his age?
   b) Which person is the youngest? What is her or his age?
   c) Which two people have the same height? What is this height?
   d) Which two people have the same age? What is this age?
   e) Which of person B or C is taller for her or his age?

2. This graph represents a day trip from Athabasca to Kikino in Alberta, a distance of approximately 140 km. Describe the journey for each segment of the graph.

Day Trip from Athabasca to Kikino

3. At the beginning of a race, Alicia took 2 s to reach a speed of 8 m/s. She ran at approximately 8 m/s for 12 s, then slowed down to a stop in 2 s. Sketch a graph of speed as a function of time. Label each section of your graph, and explain what it represents.

4. Sketch a possible graph of *Depth of Water vs Time* given the following sequence of events:

   Mikey turns on the bathtub taps and goes to the kitchen to make a sandwich. After 3 minutes, Mikey turns off the taps and goes back to the kitchen to eat his sandwich. He returns 2 minutes later and gets in the bathtub. 10 minutes later, Mikey gets out of the bathtub and flexes in front of the mirror for 30 seconds before removing the plug to drain the tub. The bathtub empties in 4 minutes.