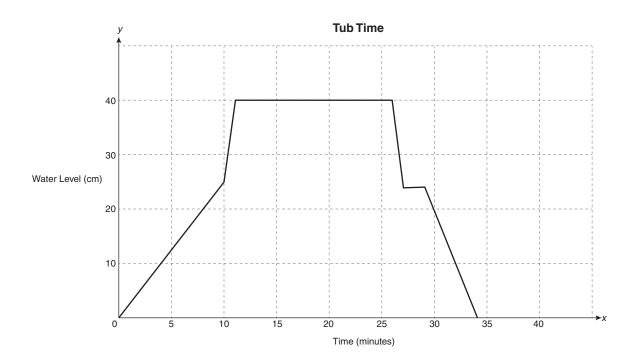
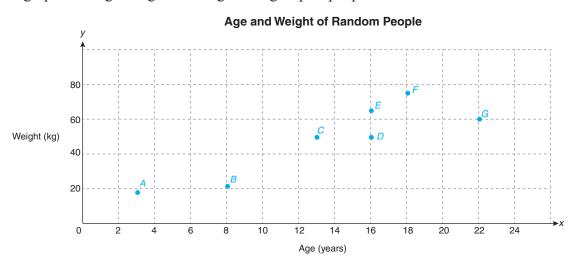


## Check Up

1. Describe a scenario that could generate the graph shown.



2. A graph relating the age and weight of a group of people are shown.



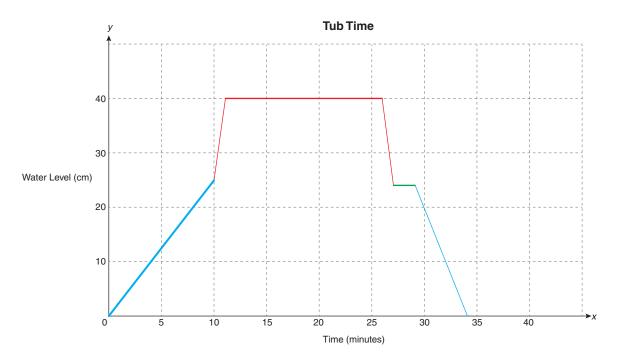
Use the data presented in the graph provided to answer the following questions.

- a. What do the horizontal and vertical axes represent?
- b. What is the age range represented by the graph?
- c. Which people have the same weight?
- d. If people's weights typically peak between the ages of 22 and 24, extrapolate person *G*'s weight at age 24.
- e. State two conclusions about the data presented in the graph.



Compare your answers.

1. Describe a scenario that could generate the graph shown.



Answers may vary. A sample is given.

The graph represents a person having a bath.

The thick blue line represents the filling of the tub. It takes about 10 minutes to fill the tub to 25 cm.

The first red line represents the person stepping into and then sitting in the tub. The water level increases from approximately 25 cm to 40 cm.

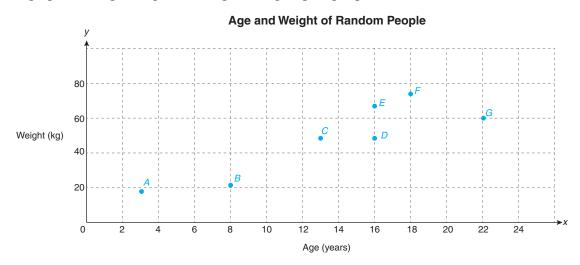
The horizontal red line represents the person sitting in the tub. The water level remains a constant 40 cm for approximately 15 minutes.

The third red line represents the person getting out of the tub. The water level decreases to approximately 25 cm once again.

The horizontal green line represents the person drying off. The water level in the tub remains constant.

The thin blue line represents the tub being drained. The water level decreases to 0 cm in approximately 5 minutes.

2. A graph relating the age and weight of a group of people are shown.



Use the data presented in the graph provided to answer the following questions.

- a. What do the horizontal and vertical axes represent?
  - The horizontal axis gives age, in years, and the vertical axis gives mass, in kilograms.
- b. What is the age range represented by the graph?
  - The ages range from as young as 3 to as old as 22 years of age.
- c. Which people have the same weight?
  - The 13 and 16 year old have approximately the same weight.
- d. If people's weights typically peak between the ages of 22 and 24, extrapolate person *G*'s weight at age 24.

A good prediction would be approximately 60 kg because person *G*'s weight at age 22 was 60 kg and it will likely peak at about that time.

- e. State two conclusions about the data presented in the graph.
  - i. In general, the older the person, the more they weigh.
  - ii. People of the same age do not necessarily weigh the same.