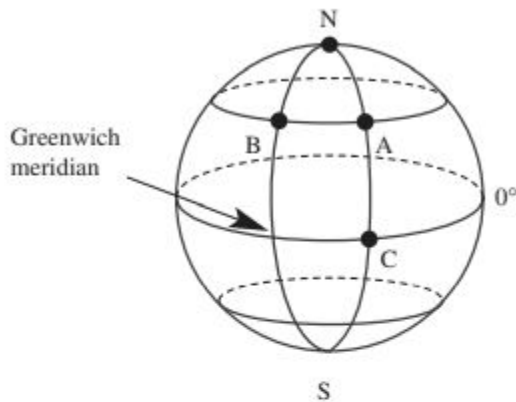


- 1 A diagram of Earth's surface is shown below. The coordinates of point A are  $(60^{\circ}\text{N}, 70^{\circ}\text{E})$ .
- What are the coordinates of point B?
  - What are the coordinates of point C?
  - What is the maximum value possible for latitude? Where does it occur?



- 2 Brussels is located at  $(50^{\circ}\text{N}, 4^{\circ}\text{E})$ . Lima is located at  $(12^{\circ}\text{S}, 77^{\circ}\text{W})$ .
- Which city is closer to the equator?
  - What is the difference in latitude between Brussels and Lima?
  - What is the difference in longitude between Brussels and Lima?
- 3 Tehran is located at  $(35^{\circ}\text{N}, 51^{\circ}\text{E})$ . Wellington is located at  $(41^{\circ}\text{S}, 174^{\circ}\text{E})$ .
- Which city is closer to the Greenwich meridian?
  - What is the difference in latitude between Teheran and Wellington?
  - What is the difference in longitude between Teheran and Wellington?
- 4 Nagoya is located at  $(35^{\circ}\text{N}, 136^{\circ}\text{E})$ . Determine the coordinates of a point that is:
- $20^{\circ}$  due south of Nagoya
  - $20^{\circ}$  due north of Nagoya
  - $20^{\circ}$  due west of Nagoya
  - $20^{\circ}$  due east of Nagoya.
- 5 Belgrade is located at  $(44^{\circ}\text{N}, 20^{\circ}\text{E})$ . Determine the coordinates of a point that is:
- $40^{\circ}$  due south of Belgrade
  - $40^{\circ}$  due north of Belgrade
  - $40^{\circ}$  due west of Belgrade
  - $40^{\circ}$  due east of Belgrade.

