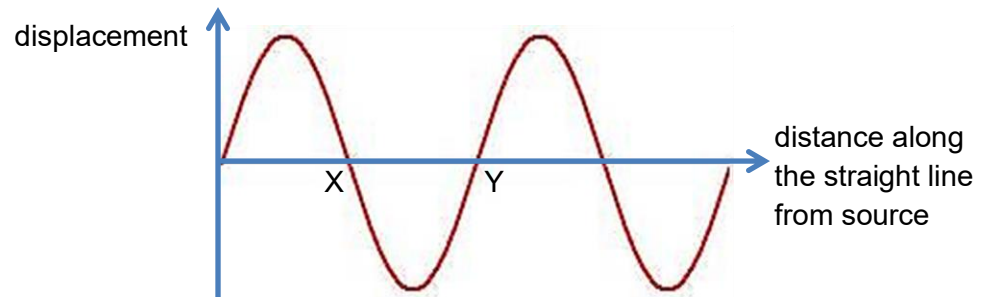


- 16** As a sound wave passes through a region of space, the displacement of the air molecules along a straight line is plotted as shown below.



Which of the following correctly describes the sound wave at locations X and Y?

|   | X           | Y           |
|---|-------------|-------------|
| A | compression | compression |
| B | compression | rarefaction |
| C | rarefaction | compression |
| D | rarefaction | rarefaction |