The diagram shows a source of sound waves and an observer.

source observer

o

Which row of the table shows a situation which would result in a decrease in the frequency of sound observed?

|          |   | Source                                      | Observer                                   |
|----------|---|---|--|
| ×        | A | moves to the right at $20  \text{m s}^{-1}$ | moves to the left at $20 \mathrm{ms^{-1}}$ |
| ×        | В | moves to the right at $20\mathrm{ms^{-1}}$  | moves to the right at 20 m s <sup>-1</sup> |
| $\times$ | C | moves to the right at $20\mathrm{ms^{-1}}$  | stationary                                 |
| ×        | D | stationary                                  | moves to the right at 20 m s <sup>-1</sup> |

## (Total for Question 6 = 1 mark)