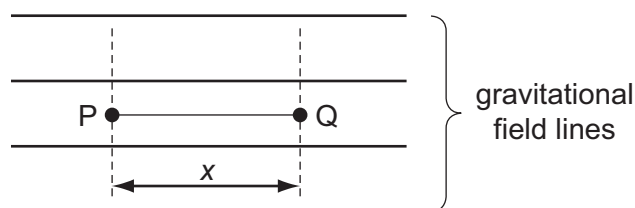


- 20 A mass  $m$  is situated in space in a uniform gravitational field.



When the mass moves through a displacement  $x$ , from P to Q, it loses an amount of potential energy  $E$ .

Which row correctly specifies the magnitude and the direction of the acceleration due to the gravity in this field?

	magnitude	direction
<b>A</b>	$\frac{E}{mx}$	$\rightarrow$
<b>B</b>	$\frac{E}{mx}$	$\leftarrow$
<b>C</b>	$\frac{E}{x}$	$\rightarrow$
<b>D</b>	$\frac{E}{x}$	$\leftarrow$

- 21 Why does the pressure increase when a sealed container of gas is heated?

- A** The gas molecules collide more often with each other.
- B** The gas molecules expand when they are heated.
- C** The gas molecules travel faster and hit the walls of the container more often.
- D** There are more gas molecules present to collide with the walls of the container.

**Space for working**