

- 23** The electric force on an  $\alpha$ -particle at point X in the electric field of a gold nucleus is 35 N.



What are the magnitude and direction of the electric field strength at X due to the gold nucleus?

	magnitude / $\text{NC}^{-1}$	direction
<b>A</b>	$5.5 \times 10^{19}$	to the left
<b>B</b>	$5.5 \times 10^{19}$	to the right
<b>C</b>	$1.1 \times 10^{20}$	to the left
<b>D</b>	$1.1 \times 10^{20}$	to the right

