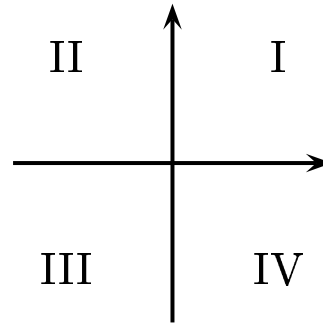
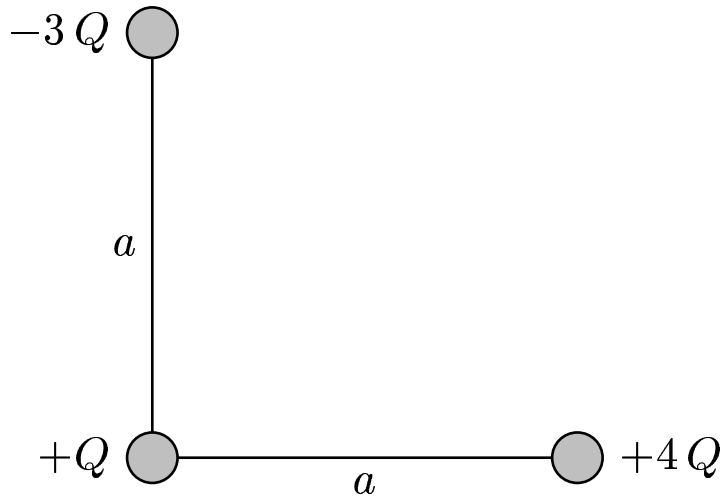


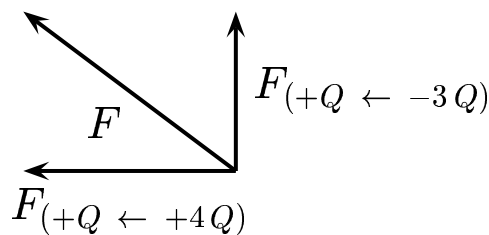
$Q$  is at the origin,  $+4Q$  is on the positive  $x$ -axis a distance  $a$  from the origin, and  $-3Q$  is on the positive  $y$ -axis a distance  $a$  from the origin.



Determine which quadrant contains the electric force on the charge  $+Q$  at the bottom left-hand corner (at the origin).

- A) I                                      B) II                                      C) III                                      D) IV

Coulomb's law is  $\vec{F}_{AB} = k \frac{Q_A Q_B}{r^2} \hat{r}_{AB}$ , which tells us that unlike charges attract and like charges repel.



Answer **B**.