3 (i) $-3x-4y=12$

$3x+4y=12$

$\frac{a_1}{a_2}=\frac{-3}{3}=-1 \quad \left|\quad \frac{b_1}{b_2}=\frac{-4}{4}=-1 \quad \right| \quad \frac{c_1}{c_2}=\frac{12}{12}=1$

$\because \frac{a_1}{a_2}=\frac{b_1}{b_2}\neq\frac{c_1}{c_2}$

$\therefore$ Inconsistent (False)

(ii) $\frac{3}{5}x-y=\frac{1}{2}$

$\frac{1}{5}x-3y=\frac{1}{6}$

$\frac{a_1}{a_2}=\frac{3/5}{1/5}=\frac{3}{5}\times\frac{5}{1}=3 \quad \left|\quad \frac{b_1}{b_2}=\frac{-1}{-3}=\frac{1}{3} \quad \right| \quad \frac{c_1}{c_2}=\frac{1/2}{1/6}=\frac{1}{12}$

$\because \frac{a_1}{a_2}\neq\frac{b_1}{b_2}$

$\therefore$ Consistent (True)

(iii) $2ax+by=a$

$4ax+2by=2a$

$\frac{A_1}{A_2}=\frac{2a}{4a}=\frac{1}{2} \quad \left|\quad \frac{B_1}{B_2}=\frac{b}{2b}=\frac{1}{2} \quad \right| \quad \frac{c_1}{c_2}=\frac{a}{2a}=\frac{1}{2}$

$\because \frac{A_1}{A_2}=\frac{B_1}{B_2}=\frac{c_1}{c_2}$

$\therefore$ consistent (True)

3 (iv) $x+3y=11$

$4x+12y=22$

$\frac{a_1}{a_2}=\frac{1}{4} \quad \left|\quad \frac{b_1}{b_2}=\frac{3}{12}=\frac{1}{4} \quad \right| \quad \frac{c_1}{c_2}=\frac{11}{22}=\frac{1}{2}$

$\because \frac{a_1}{a_2}=\frac{b_1}{b_2}\neq\frac{c_1}{c_2}$

Inconsistent
(False)