

EXERCISE 3.6

1. Solve the following pairs of equations by reducing them to a pair of linear equations:

$$(i) \frac{1}{2x} + \frac{1}{3y} = 2$$

$$\frac{1}{3x} + \frac{1}{2y} = \frac{13}{6}$$

$$(iii) \frac{4}{x} + 3y = 14$$

$$\frac{3}{x} - 4y = 23$$

$$(ii) \frac{2}{\sqrt{x}} + \frac{3}{\sqrt{y}} = 2$$

$$\frac{4}{\sqrt{x}} - \frac{9}{\sqrt{y}} = -1$$

$$(iv) \frac{5}{x-1} + \frac{1}{y-2} = 2$$

$$\frac{6}{x-1} - \frac{3}{y-2} = 1$$