

eqns can be rewritten as,

5 (a) $ay + x^2y = x$ ①

$$ay + x^2y = b$$
 ②

$$\Rightarrow x = b$$

and substituting x in ①, we get

$$y = \frac{b}{a+b^2}$$

(b) from eq ① & ②,

$$x = y(a+x^2)$$

$$y = \frac{b}{a+x^2}$$

③ eq ② can be rearranged as

$$x^2 = \frac{b}{y} - a$$

$$\Rightarrow x = \sqrt{\frac{b}{y} - a}$$

Similarly eq ① can be written as $y = \frac{x}{x^2 + a}$