

$$\begin{aligned} \textcircled{3} \quad 5x + 2y &= 22 \quad \textcircled{1} \\ 4x + 3y &= 19 \quad \textcircled{2} \end{aligned}$$

$$\times 3 \quad 15x + 6y = 66$$

$$\times 2 \quad 8x + 6y = 38$$

$$\textcircled{1} - \textcircled{2} \Rightarrow 7x = 28 \quad 28 \div 7 = 4 \therefore \textcircled{x=4}$$

$$\Rightarrow 5(4) + 2y = 22 \Rightarrow 20 + 2y = 22 \therefore \textcircled{y=1}$$

$$\textcircled{4} \text{ i) } x^8 \times x \times x^9$$

$$8 + 1 + 9 = \underline{18}$$

$$\Rightarrow \textcircled{x^{18}} = \del{x^{18}}$$

$$\text{ii) } (2x^3)^3$$

$$\Rightarrow 2^3 = 8$$

$$\Rightarrow 3 \times 3 = 9 \therefore (2x^3)^3 \Rightarrow \textcircled{8x^9}$$

$$\text{iii) } \frac{x^{12} \times x^8}{x}$$

$$\Rightarrow x^{12} \times x^8 = x^{20}$$

$$\Rightarrow x^{20} \div x = \textcircled{x^{19}}$$

$$\text{iv) } 5x^2 \times 3x^4$$

$$\Rightarrow 5 \times 3 = 15 \Rightarrow 15x$$

$$\Rightarrow 2 + 4 = 6$$

$$\Rightarrow = \textcircled{15x^6}$$