

$$\textcircled{1} \quad \frac{8x-3}{3x} = 2$$

$$\Rightarrow 6x = 8x - 3$$

$$\Rightarrow 6x - 8x = -3$$

$$\Rightarrow -2x = -3$$

$$\Rightarrow x = \frac{-3}{-2}$$

$$\Rightarrow x = \frac{3}{2}$$

$$\textcircled{2} \quad \frac{9x}{7-6x} = 15$$

$$\Rightarrow 105 - 90x = 9x$$

$$\Rightarrow -90x - 9x = -105$$

$$\Rightarrow -99x = -105$$

$$\Rightarrow x = \frac{-\cancel{105} \ 35}{-\cancel{99} \ 33}$$

$$\Rightarrow x = \frac{35}{33}$$

$$\textcircled{3} \quad \frac{z}{z+15} = \frac{4}{9}$$

$$\Rightarrow 9z = 4z + 60$$

$$\Rightarrow 9z - 4z = 60$$

$$\Rightarrow 5z = 60$$

$$\Rightarrow z = \frac{\cancel{60} \ 12}{\cancel{5} \ 5}$$

$$\Rightarrow z = 12$$