

$$\{D\} = d \cap d' \Leftrightarrow \begin{cases} y = \frac{3}{4}x + \frac{15}{4} \\ y = 2x \end{cases}$$

$$\Leftrightarrow \begin{cases} 2x = \frac{3}{4}x + \frac{15}{4} \\ y = 2x \end{cases}$$

$$\Leftrightarrow \begin{cases} 2x - \frac{3}{4}x = \frac{15}{4} \\ y = 2x \end{cases}$$

$$\Leftrightarrow \begin{cases} \frac{5}{4}x = \frac{15}{4} \\ y = 2x \end{cases}$$

$$\Leftrightarrow \begin{cases} x = 3 \\ y = 6 \end{cases}$$

$$\Leftrightarrow D(3, 6).$$