

$$31. \begin{cases} x - 2y = 4 \\ 3x - 4y = 1 \end{cases} \rightarrow x = 2y + 4$$

$$3(2y + 4) - 4y = 1$$

$$6y + 12 - 4y = 1$$

$$2y + 12 = 1$$

$$2y = -11$$

$$y = -\frac{11}{2}$$

$$x - 2\left(-\frac{11}{2}\right) = 4$$

$$x + 11 = 4$$

$$x = -7$$

$$\boxed{(-7, -11/2)}$$

32. methods of solving systems of equations:

- ① Graphing
- ② Elimination
- ③ substitution

$$33. f(x) = \begin{cases} 3x - 1, & \text{when } x < 2 \\ 3x, & \text{when } x \geq 2 \end{cases}$$

$f(3)$
 $\leftarrow x=3$ because $3 \geq 2$, plug into piece #2

$$f(3) = 3x$$

$$f(3) = 3(3)$$

$$\boxed{f(3) = 9}$$

$$34. 2x - y < 3$$

$$-y < -2x + 3$$

$$y > 2x - 3$$

