Conclusion: 75(g) of B. 25(g) A.

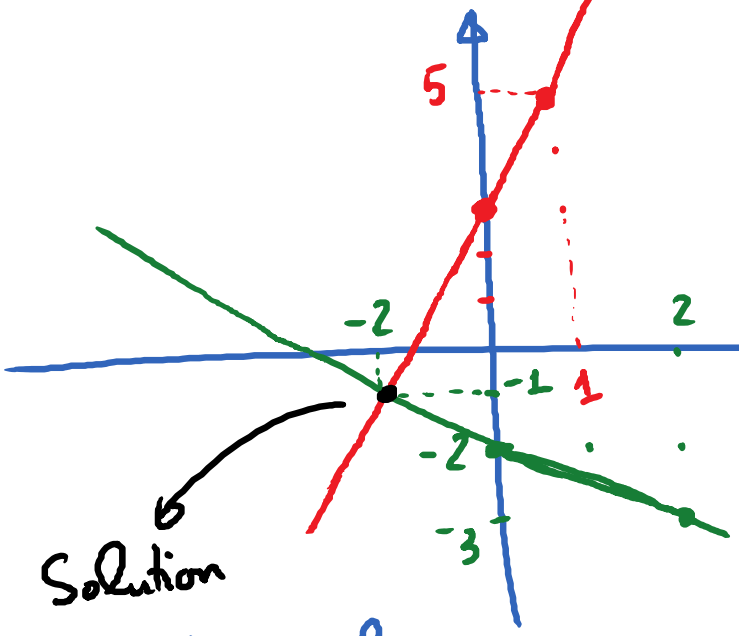
Method of Graphing

$$\begin{cases} 2x - y = -3 \\ x + 2y = -4 \end{cases}$$

Solve this by graphing.

$y = 2x + 3$

$y = -\frac{1}{2}x - 2$



Solution: $(-2, -1)$

Solution

Important Terminology:

- **Consistent**
  - **Independent** — unique solution — 2 lines intersect once
  - **Dependent** — Infinitely many solutions (2 lines are the same)
- **Inconsistent** (No Solution) — parallel lines

E.g. $\begin{cases} x + 2y = 4 \\ -3x - 6y = -12. \end{cases}$ multiply by -3

$\longrightarrow$ dependent, consistant system (infinitely many solutions)

let $x = t$; t is any real #.

$t + 2y = 4 \longrightarrow 2y = -t + 4$

$y = -\frac{1}{2}t + 2.$

Any solution will have the form:

$$\left(t, -\frac{1}{2}t + 2\right)$$