

WORKSHEET

CLASSIFYING SYSTEM OF EQUATIONS ACCORDING TO NUMBER OF SOLUTIONS

Determine the number of solutions the system has. Then state whether the system of equations is **consistent** or **inconsistent** and if it is **independent** or **dependent**.

Consistent and independent

Consistent and dependent

Inconsistent

$$\begin{aligned}y &= \frac{1}{2}x \\y &= x + 2\end{aligned}$$

$$\begin{aligned}4x - 6y &= 12 \\-2x + 3y &= -6\end{aligned}$$

$$\begin{aligned}8x - 4y &= 16 \\-5x - 5y &= 5\end{aligned}$$

$$\begin{aligned}2x + 3y &= 10 \\4x + 6y &= 12\end{aligned}$$

$$\begin{aligned}y &= -\frac{3}{2}x + 5 \\y &= -\frac{2}{3}x + 5\end{aligned}$$

$$\begin{aligned}y &= x - 3 \\y &= -4x + 3\end{aligned}$$