1. Solve the simultaneous equations

$$
\begin{aligned}
& 3 x+y=5 \\
& 3 x-4 y=10
\end{aligned}
$$

\{FYI Avoid many negative number problems, by 2 nd equation $\times-1$ (changes all signs) $\}$

Is there another method you know to solve these?

$$
\begin{aligned}
& 3 x+y=5 \\
& 3 x-4 y=10
\end{aligned}
$$

2. Solve the simultaneous equations

$$
\begin{aligned}
& 3 y-5 x=29 \\
& 3 y-2 x=17
\end{aligned}
$$

\{FYI Avoid many negative number problems, by 1st equation $\times-1$ (changes all signs) $\}$
3. Solve the simultaneous equations

$$
\begin{aligned}
& 3 x+y=5 \\
& 4 x+y=6.5
\end{aligned}
$$

\{FYI Avoid many negative number problems, by 1st equation $\times-1$ (changes all signs) $\}$
4. Solve the simultaneous equations

$$
\begin{aligned}
& 5 x+2 y=18 \\
& 3 x+2 y=12
\end{aligned}
$$

\{FYI Avoid many negative number problems, by 2 nd equation $\times-1$ (changes all signs) $\}$

Answers

1. $x=2, y=-1$

1st method: as suggested gives $5 \mathrm{y}=-5$
2nd method: 1st equation $\times 4$, to get $15 \mathrm{x}=30$
2. $x=-4, y=3$
3. $\mathrm{x}=1.5, \mathrm{y}=0.5$
4. $\mathrm{x}=3, \mathrm{y}=1.5$

