

| Glue Zone |  |  |  |
| :--- | :--- | :--- | :--- |
| G.g. sad, sick, tired, <br> bored | E.g. happy, calm, <br> focused, ok | E.g. worried, excited, <br> annoyed | E.g. angry, terrified, <br> elated |
|  |  |  |  |

https://app.mymaths.co.uk/196-lesson/simultaneous-
equations-1

## Linear Simultaneous Equations

(1) $3 t+c=220$

$$
\text { (2) } 3 t+2 c=320
$$

What is the difference?
In order to find the difference, vre need 40 find a way to eliminate one of the variables. In this example, subtracting will eliminate $\dagger$ from our equation.

$$
c=100
$$

Substitute c into equation 1

```
3t+100=220
    and solve
\[
\begin{gathered}
3 t=220-100 \\
t=4200 \div 3
\end{gathered}
\]
```


## Linear Simultaneous Equations

II
(1) $4 y+3 x=15$
(2) $4 y+x=13$

$$
\begin{aligned}
& 1-2 \\
& 2 x=2 \\
& x=R \div 2
\end{aligned}
$$

Substitute $x$ into equation 2

$$
\begin{aligned}
4 y+1 & =13 \\
4 y & =12-1 \\
y & =32 \div 4
\end{aligned}
$$

## Solve these simultaneous equations.

$$
\begin{aligned}
6 c+2 d & =26 \\
6 c+4 d & =28 \\
c & =\square \\
d & =\square
\end{aligned}
$$

$$
\begin{aligned}
5 e+3 f & =20 \\
7 e+3 f & =22 \\
e & =\square \\
f & =\square
\end{aligned}
$$

$4 g+3 h=30$
$8 j+2 k=42$
$4 g+8 h=40$

$$
7 j+2 k=37
$$

$$
\begin{aligned}
& g=\square \\
& h=\square
\end{aligned}
$$

$$
j=\square
$$

$$
k=\square
$$

Solve these simultaneous equations.

$$
\begin{aligned}
2 a+7 b & =62 \\
3 a+7 b & =65 \\
a & =\square \\
b & =\square
\end{aligned}
$$

$$
\begin{aligned}
8 e+8 f & =72 \\
7 e+8 f & =71 \\
e & =\square \\
f & =\square
\end{aligned}
$$

$$
\begin{aligned}
8 c+6 d & =78 \\
6 c+6 d & =66 \\
c & =\square \\
d & =\square
\end{aligned}
$$

$8 g+8 h=72$
$8 g+5 h=54$

$$
g=\square
$$

$$
h=\square
$$

Solve these simultaneous equations.

$$
\begin{aligned}
8 g+8 h & =56 \\
3 g+8 h & =51 \\
g & =\square \\
h & =\square
\end{aligned}
$$

$$
4 j+3 k=19
$$

$$
4 j+2 k=18
$$

$$
j=\square
$$

$$
k=\square
$$

$$
\begin{aligned}
4 m+3 n & =36 \\
4 m+7 n & =68 \\
m & =\square \\
n & =\square
\end{aligned}
$$

$$
\begin{aligned}
4 p+8 q & =24 \\
6 p+8 q & =32 \\
p & =\square \\
q & =\square
\end{aligned}
$$

Traffic light your work today.

Thumbs down-I don't understand it
Thumbs across- I understand some of it
Thumbs up-I understand all of it

A further task will be on the website for you to complete later today - one merit for all who do ©

