## Solving equations

An equation tells us that two expressions are equal, like a formula, as such we apply similar rules to equations when solving them. We always keep equations "balanced" therefore keeping the two expressions either side of the " $=$ " equal.

| E.g. Solve: |  | E.g. Solve: |  |
| :---: | :---: | :---: | :---: |
| $2(5 x-4)=12$ | $\leftarrow$ Divide by 2 | $3 a+4$ |  |
| $5 x-4=6$ | $\leftarrow$ Add 4 | $\frac{2}{2}=11$ | $\leftarrow$ Multiply by 2 |
| $5 x=10$ | $\leftarrow$ Divide by 5 | $3 a+4=22$ | $\leftarrow$ Subtract 4 |
| $x=2$ |  | $\begin{aligned} 3 a & =18 \\ a & =6 \end{aligned}$ | $\leftarrow$ Divide by 3 |

Video: https://youtu.be/30S7WxKcPwg (Solving equations)

