# Equations - Reversing Operations Questions

The goal in solving an equation is to isolate the pronumeral on one side of the equation.
Set out your work as per the following examples:

| One Step Equation | Two Steps Equation |
|---|---|
| $f + 9 = 20$ | $4p + 5 = 25$ |
| $f + 9 - 9 = 20 - 9$ | $4p + 5 - 5 = 25 - 5$ |
| $f = 11$ | $4p = 20$ |
| | $\dfrac{4p}{4} = \dfrac{20}{4}$ |
| | $p = 5$ |

Your turn – using the set out above to rearrange your equations using inverse operations, find out what the pronumerals represent.

| EASIER | MEDIUM | CHALLENGING |
|---|---|---|
| 1/ $p + 7 = 10$ | 7/ $4p + 7 = 23$ | 13/ $4(p + 2) = 22$ |
| 2/ $p - 10 = 30$ | 8/ $p - 13 = -5$ | 14/ $6(p-1) = -19$ |
| 3/ $p + 5 = 23$ | 9/ $6p = -24$ | 15/ $2p + p = 20 - 5$ |
| 4/ $2p = 10$ | 10/ $2p - 4 = 3$ | 16/ $9p - 5 - 3p = 17$ |
| 5/ $\dfrac{p}{3} = 10$ | 11/ $\dfrac{p}{2} + 1 = 3$ | |
| 6/ $6p = 42$ | 12/ $4p + 15 = 27$ | |