Fast 5

63259 + 5261

861 x 28

20% of 4630

One third of 330

5/8 of 40

63259 + 5261 = 68250   861 x 28 = 24108

20% of 4630 = 926

One third of 330 = 110   5/8 of 40 = 25
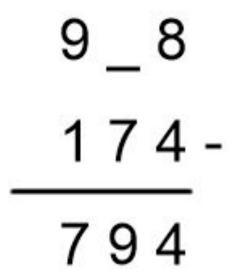
Can I solve missing number problems?

When we're subtracting numbers, we know that we can always use the column method to find the answer.

$$
\begin{array}{r}
8\ 7\ 6 \\
2\ 5\ 1\ - \\
\hline
6\ 2\ 5
\end{array}
$$

What can we do though, when there's a missing digit (or digits) but we are given the answer?

$$\begin{array}{r} \_\,8\,2 \\ 1\,4\,1\,- \\ \hline 8\,4\,1 \end{array}$$

As we know we don't need to exchange using our missing number, we can work out that _ - 1 = 8 must give us a missing number of 9

$$
\begin{array}{r}
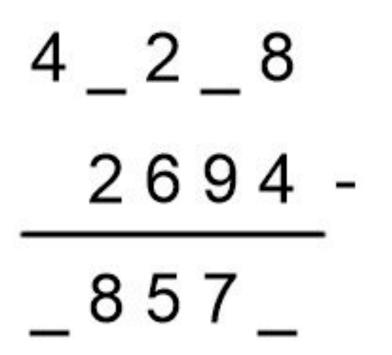9\ 8\ 2 \\
1\ 4\ 1\ - \\
\hline
8\ 4\ 1
\end{array}
$$

What if we have to do an extra step, because we've had to exchange?

$$
\begin{array}{r}
9\_8 \\
174\ - \\
\hline
794
\end{array}
$$

We have a missing number here, but there are several clues around it which let us know what it might be. We can see in the hundreds column that we have 9-1=7, which cannot be correct unless we exchange somewhere.

$$
\begin{array}{r}
\overset{8}{\cancel{9}}\,\overset{1}{6}\,8 \\
1\ 7\ 4\ - \\
\hline
7\ 9\ 4
\end{array}
$$

We know that 8-4=4, so we can answer that quickly.

Next, we have _+7=9. We know that the missing number must be 16, so we'll put the 6 in place for now.

After that, we know we'll have to exchange a 1 from our 9 to our 6 to make 16, which leaves us with 8-1=7

We can take this even further by going up to the year 6 expectation for subtraction.

$$4\_2\_8$$
$$2\,6\,9\,4\ -$$
$$\underline{}$$
$$\_8\,5\,7\_$$

This might look a lot more complex, but it's just an extension of what we've already looked at.

If we remember to exchange where our answers would otherwise be less than 0, as well as moving 1 from the next column, we can systematically solve any subtraction problem.

$$
\begin{array}{r}
\overset{\overset{1}{3}}{4}\,\overset{\overset{1}{0}}{1}\,\overset{1}{2}\,\overset{1}{6}\,8 \\
2\,6\,9\,4\, - \\
\hline
3\,8\,5\,7\,4
\end{array}
$$