

“Big 7” Division (named after the bracket). You can take any multiple of the divisor out at a time. Use front-end estimation and a zero for each digit to the right in the dividend that is not used in your front-end estimation.

$ \begin{array}{r} 7 \overline{)6942} \\ \underline{-6300} \\ 642 \\ \underline{-630} \\ 12 \\ \underline{-7} \\ \text{R } 5 \end{array} $	<p>Divisor x Quotient = Dividend</p> $7 \times \textcircled{900} = 6300$ $7 \times \textcircled{90} = 630$ $7 \times \textcircled{\underline{1}} = \underline{7}$ <hr style="width: 100%;"/> <p>ANS: $\textcircled{991\text{R}5} = 6937$</p> $ \begin{array}{r} \underline{+5} \\ 6942 \end{array} $
------------------------------------------------------------------------------------------------------------------------------------------------------	-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

Notes

Step 1: $7 \times 9 = 63$, two digits not used so add 2 zeros: 6300.

Step 2: $7 \times 9 = 63$, one digit not used so add 1 zero: 630.

Step 3: $7 \times 1 = 7$.

$ \begin{array}{r} 45 \overline{)957} \\ \underline{-900} \\ 57 \\ \underline{-45} \\ \text{R } 12 \end{array} $	$45 \times \textcircled{20} = 900$ $45 \times \textcircled{\underline{1}} = \underline{+45}$ <hr style="width: 100%;"/> <p>$\textcircled{21\text{R}12} \quad 945$</p> $ \begin{array}{r} \underline{+12} \\ 957 \end{array} $
--------------------------------------------------------------------------------------------------------------------------	-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

Notes

Step 1: 4 will go into 9 twice, one digit not used so add 1 zero: 20

Step 2: 45 will go into 57 one time.