

Division

Part 1 Rearranging the Sum

The box opposite shows a division sum that has been rearranged to make a multiplication sum.

Try working out the answers to the divisions below using this method.

$$\begin{array}{l} 84 \div 7 = ? \\ ? \times 7 = 84 \\ ? = 12 \end{array}$$

- | | | |
|----------------|-----------------|-------------------|
| 1) $64 \div 8$ | 5) $27 \div 3$ | 9) $72 \div 6$ |
| 2) $42 \div 3$ | 6) $55 \div 5$ | 10) $121 \div 11$ |
| 3) $81 \div 9$ | 7) $84 \div 12$ | 11) $68 \div 4$ |
| 4) $49 \div 7$ | 8) $84 \div 7$ | 12) $156 \div 12$ |

Part 2 The Bus Stop Method

In the box opposite is an example of a division that has been calculated using the Bus Stop Method.

Try these divisions using the same method.

$$\begin{array}{r} 2 \overline{) 3564} \\ 2 \overline{) 356} \end{array}$$

- | | | |
|-----------------|------------------|--------------------|
| 1) $846 \div 2$ | 4) $888 \div 6$ | 7) $18340 \div 10$ |
| 2) $672 \div 3$ | 5) $1554 \div 7$ | 8) $384 \div 12$ |
| 3) $528 \div 4$ | 6) $2088 \div 9$ | 9) $123 \div 2$ |

Part 3 Simplifying the calculation

The division $504 \div 36$ would be difficult to do using the bus stop method. However we can simplify the calculation as shown in the box opposite.

Try doing these divisions in this way.

- | | |
|------------------|--------------------|
| 1) $288 \div 16$ | 7) $504 \div 36$ |
| 2) $266 \div 14$ | 8) $308 \div 28$ |
| 3) $162 \div 18$ | 9) $532 \div 19$ |
| 4) $168 \div 24$ | 10) $336 \div 48$ |
| 5) $456 \div 24$ | 11) $1296 \div 48$ |
| 6) $512 \div 16$ | 12) $1296 \div 96$ |

$$504 \div 36$$

Both numbers will divide by 2
 $252 \div 18$

Both numbers will divide by 2
 $126 \div 9$

Both numbers will divide by 3
 $42 \div 3$

$$42 \div 3 = 14$$

Part 4 Challenge!

Using the above methods try to work out the division sum shown. No calculators!

$$177408 \div 2688$$

Division

Answers to Division Methods questions

Part 1 Rearranging the Sum

- | | | |
|---------------------|---------------------|------------------------|
| 1) $64 \div 8 = 8$ | 5) $27 \div 3 = 9$ | 9) $72 \div 6 = 12$ |
| 2) $42 \div 3 = 14$ | 6) $55 \div 5 = 11$ | 10) $121 \div 11 = 11$ |
| 3) $81 \div 9 = 9$ | 7) $84 \div 12 = 7$ | 11) $68 \div 4 = 17$ |
| 4) $49 \div 7 = 7$ | 8) $84 \div 7 = 12$ | 12) $156 \div 12 = 13$ |

Part 2 The Bus Stop Method

- | | | |
|-----------------------|------------------------|---------------------------|
| 1) $846 \div 2 = 423$ | 4) $888 \div 6 = 148$ | 7) $18340 \div 10 = 1834$ |
| 2) $672 \div 3 = 224$ | 5) $1554 \div 7 = 222$ | 8) $384 \div 12 = 32$ |
| 3) $528 \div 4 = 132$ | 6) $2088 \div 9 = 232$ | 9) $123 \div 2 = 61.5$ |

Part 3 Simplifying the calculation

- | | |
|-----------------------|---------------------------|
| 1) $288 \div 16 = 18$ | 7) $504 \div 36 = 14$ |
| 2) $266 \div 14 = 19$ | 8) $308 \div 28 = 11$ |
| 3) $162 \div 18 = 9$ | 9) $532 \div 19 = 28$ |
| 4) $168 \div 24 = 7$ | 10) $336 \div 48 = 7$ |
| 5) $456 \div 24 = 19$ | 11) $1296 \div 48 = 27$ |
| 6) $512 \div 16 = 32$ | 12) $1296 \div 96 = 13.5$ |

Part 4 Challenge!

Answer = 66