

# Addition

789 + 642 becomes

$$\begin{array}{r} \phantom{+} 7 \phantom{00} 8 \phantom{00} 9 \\ + 6 \phantom{00} 4 \phantom{00} 2 \\ \hline 1 \phantom{00} 4 \phantom{00} 3 \phantom{00} 1 \\ \hline \phantom{00} 1 \phantom{00} 1 \end{array}$$

Answer: 1431

# Subtraction

874 – 523 becomes

$$\begin{array}{r} 874 \\ - 523 \\ \hline 351 \\ \hline \end{array}$$

Answer: 351

932 – 457 becomes

$$\begin{array}{r} 8 \quad 12 \quad 1 \\ \cancel{9} \quad \cancel{3} \quad 2 \\ - 4 \quad 5 \quad 7 \\ \hline 4 \quad 7 \quad 5 \\ \hline \end{array}$$

Answer: 475

# Short multiplication

24 × 6 becomes

$$\begin{array}{r} \phantom{1} 24 \\ \times \phantom{1} 6 \\ \hline 144 \\ \hline 2 \end{array}$$

Answer: 144

342 × 7 becomes

$$\begin{array}{r} \phantom{2} 342 \\ \times \phantom{2} 7 \\ \hline 2394 \\ \hline 21 \end{array}$$

Answer: 2394

2741 × 6 becomes

$$\begin{array}{r} \phantom{1} 2741 \\ \times \phantom{1} 6 \\ \hline 16446 \\ \hline 42 \end{array}$$

Answer: 16 446

# Long multiplication

$24 \times 16$  becomes

$$\begin{array}{r}
 \phantom{\times} \phantom{\phantom{\phantom{0}}} 2 \\
 \phantom{\times} \phantom{\phantom{0}} \mathbf{24} \\
 \times \phantom{\phantom{0}} \mathbf{16} \\
 \hline
 \mathbf{240} \\
 \mathbf{144} \\
 \hline
 \mathbf{384}
 \end{array}$$

Answer: 384

$124 \times 26$  becomes

$$\begin{array}{r}
 \phantom{\times} \phantom{\phantom{\phantom{\phantom{0}}} 1} \phantom{2} \\
 \phantom{\times} \phantom{\phantom{0}} \phantom{2} \mathbf{124} \\
 \times \phantom{\phantom{0}} \phantom{2} \mathbf{26} \\
 \hline
 \mathbf{2480} \\
 \phantom{0} \mathbf{744} \\
 \hline
 \mathbf{3224} \\
 \hline
 \phantom{0} \phantom{0} \phantom{0} \mathbf{11}
 \end{array}$$

Answer: 3224

$124 \times 26$  becomes

$$\begin{array}{r}
 \phantom{\times} \phantom{\phantom{\phantom{\phantom{0}}} 1} \phantom{2} \\
 \phantom{\times} \phantom{\phantom{0}} \phantom{2} \mathbf{124} \\
 \times \phantom{\phantom{0}} \phantom{2} \mathbf{26} \\
 \hline
 \phantom{0} \mathbf{744} \\
 \mathbf{2480} \\
 \hline
 \mathbf{3224} \\
 \hline
 \phantom{0} \phantom{0} \phantom{0} \mathbf{11}
 \end{array}$$

Answer: 3224

# Short division

98 ÷ 7 becomes

$$\begin{array}{r} 14 \\ 7 \overline{) 98} \\ \underline{7} \phantom{0} \\ 28 \\ \underline{28} \\ 0 \end{array}$$

Answer: 14

432 ÷ 5 becomes

$$\begin{array}{r} 86 \text{ r } 2 \\ 5 \overline{) 432} \\ \underline{40} \phantom{0} \\ 32 \\ \underline{30} \\ 2 \end{array}$$

Answer: 86 remainder 2

496 ÷ 11 becomes

$$\begin{array}{r} 45 \text{ r } 1 \\ 11 \overline{) 496} \\ \underline{44} \phantom{0} \\ 56 \\ \underline{55} \\ 1 \end{array}$$

Answer:  $45 \frac{1}{11}$

# Long division

432 ÷ 15 becomes

$$\begin{array}{r}
 \phantom{15} \overline{) 432} \phantom{00} \text{r } 12 \\
 \underline{300} \\
 132 \\
 \underline{120} \\
 12
 \end{array}$$

Answer: 28 remainder 12

432 ÷ 15 becomes

$$\begin{array}{r}
 \phantom{15} \overline{) 432} \phantom{00} \\
 \underline{300} \quad 15 \times 20 \\
 132 \\
 \underline{120} \quad 15 \times 8 \\
 12
 \end{array}$$

$$\frac{\cancel{12}}{\cancel{15}} = \frac{4}{5}$$

Answer:  $28 \frac{4}{5}$

432 ÷ 15 becomes

$$\begin{array}{r}
 \phantom{15} \overline{) 432.8} \\
 \underline{300} \\
 132 \\
 \underline{120} \\
 120 \\
 \underline{120} \\
 0
 \end{array}$$

Answer: 28.8