Addition and subtraction

| 789 + 642 becomes | 874 − 523 becomes | 932 − 457 becomes | 932 − 457 becomes |

789 + 642 becomes

```
    7  8  9
+   6  4  2
_____
 1  4  3  1
    1  1
```

Answer: 1431

874 − 523 becomes

```
    8  7  4
−   5  2  3
_____
    3  5  1
```

Answer: 351

932 − 457 becomes

```
   8  12  1
   9   3  2
−  4   5  7
_____
   4   7  5
```

Answer: 475

932 − 457 becomes

```
      1   1
   9  3   2
−  4  5   7
   5  6
_____
   4  7   5
```

Answer: 475

Short multiplication

24 × 6 becomes

```
      2  4
×        6
_____
   1  4  4
      2
```

Answer: 144

342 × 7 becomes

```
      3  4  2
×           7
_____
   2  3  9  4
      2  1
```

Answer: 2394

2741 × 6 becomes

```
      2  7  4  1
×              6
_____
   1  6  4  4  6
         4  2
```

Answer: 16 446

Short division

98 ÷ 7 becomes

```
      1  4
    _____
  7 | 9  8
       2
```

Answer: 14

432 ÷ 5 becomes

```
        8  6  r 2
     _____
  5 | 4  3  2
           3
```

Answer: 86 remainder 2

496 ÷ 11 becomes

```
          4  5  r 1
       _____
 1  1 | 4  9  6
             5
```

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

Addition and subtraction

789 + 642 becomes	874 – 523 becomes	932 – 457 becomes	932 – 457 becomes
| ```
    7  8  9
 +  6  4  2
 ─────────
 1  4  3  1
    1  1
``` | ```
    8  7  4
 -  5  2  3
 ─────────
    3  5  1
``` | ```
  8  12  1
  9   3  2
 -4   5  7
 ─────────
  4   7  5
``` | ```
   1  1
   9  3  2
 - 4  5  7
    5  6
 ─────────
   4  7  5
``` |
| Answer: 1431 | Answer: 351 | Answer: 475 | Answer: 475 |

Short multiplication

24 × 6 becomes	342 × 7 becomes	2741 × 6 becomes
| ```
       2  4
 ×        6
 ─────────
    1  4  4
       2
``` | ```
       3  4  2
 ×           7
 ─────────
    2  3  9  4
       2  1
``` | ```
    2  7  4  1
 ×           6
 ─────────
 1  6  4  4  6
    4  2
``` |
| Answer: 144 | Answer: 2394 | Answer: 16 446 |

Long multiplication

24 × 16 becomes	124 × 26 becomes	124 × 26 becomes
| ```
       2
       2  4
 ×     1  6
 ─────────
    2  4  0
    1  4  4
 ─────────
    3  8  4
``` | ```
    1  2
    1  2  4
 ×        2  6
 ─────────
    2  4  8  0
       7  4  4
 ─────────
    3  2  2  4
       1  1
``` | ```
    1  2
    1  2  4
 ×        2  6
 ─────────
       7  4  4
    2  4  8  0
 ─────────
    3  2  2  4
       1  1
``` |
| Answer: 384 | Answer: 3224 | Answer: 3224 |

Short division

98 ÷ 7 becomes	432 ÷ 5 becomes	496 ÷ 11 becomes
| ```
        1   4
     ┌────────
   7 │ 9  2 8
``` | ```
          8   6  r 2
       ┌───────────
     5 │ 4  3  3 2
``` | ```
          4   5  r 1
        ┌───────────
   1  1 │ 4  9  5 6
``` |
| Answer: 14 | Answer: 86 remainder 2 | Answer: $45\frac{1}{11}$ |

Long division

432 ÷ 15 becomes	432 ÷ 15 becomes	432 ÷ 15 becomes
| ```
           2  8  r 12
       ┌────────────
  1  5 │ 4  3  2
         3  0  0
       ────────
         1  3  2
         1  2  0
       ────────
            1  2
``` | ```
           2  8
       ┌────────────
  1  5 │ 4  3  2
         3  0  0      15×20
       ────────
         1  3  2
         1  2  0      15×8
       ────────
            1  2

       12 = 4
       15   5
``` | ```
           2  8 · 8
       ┌────────────
  1  5 │ 4  3  2 · 0
         3  0  ↓
       ────────
         1  3  2
         1  2  0 ↓
       ────────
            1  2  0
            1  2  0
          ────────
               0
``` |
| Answer: 28 remainder 12 | Answer: $28\frac{4}{5}$ | Answer: 28·8 |