# Solved Long Division Problems with Step-By-Step Walkthrough

Steps:    (1) Divide    (2) Multiply    (3) Subtract    (4) Bring down the next number    (5) Repeat if needed

*Solutions are on page 2*

(1)

$$998\overline{)545754}$$

(2)

$$883\overline{)417955}$$

(3)

$$166\overline{)204975}$$

# Solved Long Division Problems with Step-By-Step Walkthrough

Steps:   (1) Divide   (2) Multiply   (3) Subtract   (4) Bring down the next number   (5) Repeat if needed

*Also see our Worksheets and Walkthroughs video: "Division - Traditional Long Division Algorithm Method Word Problems"*

---

## (1)

```
              546 R846
        ┌─────────────
  998   │ 545754
      −    4990          ( 5 x 998 )
           ────
           4675
      −    3992          ( 4 x 998 )
           ────
           6834
      −    5988          ( 6 x 998 )
           ────
Remainder -->  846
```

Divide, Multiply, Subtract, Bring down, Repeat

Divide 998 into 5457 ( = 5 )
Multiply 5 times 998 ( = 4990 )
Subtract 4990 from 5457 ( = 467 )
Bring down the 5

Divide 998 into 4675 ( = 4 )
Multiply 4 times 998 ( = 3992 )
Subtract 3992 from 4675 ( = 683 )
Bring down the 4

Divide 998 into 6834 ( = 6 )
Multiply 6 times 998 ( = 5988 )
Subtract 5988 from 6834 ( = 846 )
Done. No more numbers to bring down.

## (2)

```
              473 R296
        ┌─────────────
  883   │ 417955
      −    3532          ( 4 x 883 )
           ────
           6475
      −    6181          ( 7 x 883 )
           ────
           2945
      −    2649          ( 3 x 883 )
           ────
Remainder -->  296
```

Divide, Multiply, Subtract, Bring down, Repeat

Divide 883 into 4179 ( = 4 )
Multiply 4 times 883 ( = 3532 )
Subtract 3532 from 4179 ( = 647 )
Bring down the 5

Divide 883 into 6475 ( = 7 )
Multiply 7 times 883 ( = 6181 )
Subtract 6181 from 6475 ( = 294 )
Bring down the 5

Divide 883 into 2945 ( = 3 )
Multiply 3 times 883 ( = 2649 )
Subtract 2649 from 2945 ( = 296 )
Done. No more numbers to bring down.

## (3)

```
              1234 R131
        ┌─────────────
  166   │ 204975
      −   166           ( 1 x 166 )
          ───
          389
      −   332           ( 2 x 166 )
          ───
          577
      −   498           ( 3 x 166 )
          ───
          795
      −   664           ( 4 x 166 )
          ───
Remainder -->  131
```

Divide, Multiply, Subtract, Bring down, Repeat

Divide 166 into 204 ( = 1 )
Multiply 1 times 166 ( = 166 )
Subtract 166 from 204 ( = 38 )
Bring down the 9

Divide 166 into 389 ( = 2 )
Multiply 2 times 166 ( = 332 )
Subtract 332 from 389 ( = 57 )
Bring down the 7

Divide 166 into 577 ( = 3 )
Multiply 3 times 166 ( = 498 )
Subtract 498 from 577 ( = 79 )
Bring down the 5

Divide 166 into 795 ( = 4 )
Multiply 4 times 166 ( = 664 )
Subtract 664 from 795 ( = 131 )
Done. No more numbers to bring down.