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)

6) 4244807

(2)

6) 4907645

(3)

6) 6608072

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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"

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(1)

```
            707467 R5
      ┌──────────────
   6  │ 4244807
      -  42              ( 7 x 6 )
        ─────
         04
       -  0               ( 0 x 6 )
         ─────
         44
       -  42              ( 7 x 6 )
         ─────
          28
        -  24             ( 4 x 6 )
          ─────
           40
         -  36            ( 6 x 6 )
           ─────
            47
          -  42           ( 7 x 6 )
            ─────
```
Remainder -->　　5

Divide, Multiply, Subtract, Bring down, Repeat

Divide 6 into 42 (= 7)
Multiply 7 times 6 (= 42)
Subtract 42 from 42 (= 0)
Bring down the 4

Divide 6 into 04 (= 0)
Multiply 0 times 6 (= 0)
Subtract 0 from 04 (= 4)
Bring down the 4

Divide 6 into 44 (= 7)
Multiply 7 times 6 (= 42)
Subtract 42 from 44 (= 2)
Bring down the 8

Divide 6 into 28 (= 4)
Multiply 4 times 6 (= 24)
Subtract 24 from 28 (= 4)
Bring down the 0

Divide 6 into 40 (= 6)
Multiply 6 times 6 (= 36)
Subtract 36 from 40 (= 4)
Bring down the 7

Divide 6 into 47 (= 7)
Multiply 7 times 6 (= 42)
Subtract 42 from 47 (= 5)
Done. No more numbers to bring down.

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(2)

```
            817940 R5
      ┌──────────────
   6  │ 4907645
      -  48              ( 8 x 6 )
        ─────
         10
       -  6               ( 1 x 6 )
         ─────
         47
       -  42              ( 7 x 6 )
         ─────
          56
        -  54             ( 9 x 6 )
          ─────
           24
         -  24            ( 4 x 6 )
           ─────
            05
          -  0            ( 0 x 6 )
            ─────
```
Remainder -->　　5

Divide, Multiply, Subtract, Bring down, Repeat

Divide 6 into 49 (= 8)
Multiply 8 times 6 (= 48)
Subtract 48 from 49 (= 1)
Bring down the 0

Divide 6 into 10 (= 1)
Multiply 1 times 6 (= 6)
Subtract 6 from 10 (= 4)
Bring down the 7

Divide 6 into 47 (= 7)
Multiply 7 times 6 (= 42)
Subtract 42 from 47 (= 5)
Bring down the 6

Divide 6 into 56 (= 9)
Multiply 9 times 6 (= 54)
Subtract 54 from 56 (= 2)
Bring down the 4

Divide 6 into 24 (= 4)
Multiply 4 times 6 (= 24)
Subtract 24 from 24 (= 0)
Bring down the 5

Divide 6 into 05 (= 0)
Multiply 0 times 6 (= 0)
Subtract 0 from 05 (= 5)
Done. No more numbers to bring down.

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(3)

```
            1101345 R2
      ┌──────────────
   6  │ 6608072
      -  6               ( 1 x 6 )
        ─────
         06
       -  6               ( 1 x 6 )
         ─────
         00
       -  0               ( 0 x 6 )
         ─────
         08
       -  6               ( 1 x 6 )
         ─────
          20
        -  18             ( 3 x 6 )
          ─────
           27
         -  24            ( 4 x 6 )
           ─────
            32
          -  30           ( 5 x 6 )
            ─────
```
Remainder -->　　2

Divide, Multiply, Subtract, Bring down, Repeat

Divide 6 into 6 (= 1)
Multiply 1 times 6 (= 6)
Subtract 6 from 6 (= 0)
Bring down the 6

Divide 6 into 06 (= 1)
Multiply 1 times 6 (= 6)
Subtract 6 from 06 (= 0)
Bring down the 0

Divide 6 into 00 (= 0)
Multiply 0 times 6 (= 0)
Subtract 0 from 00 (= 0)
Bring down the 8

Divide 6 into 08 (= 1)
Multiply 1 times 6 (= 6)
Subtract 6 from 08 (= 2)
Bring down the 0

Divide 6 into 20 (= 3)
Multiply 3 times 6 (= 18)
Subtract 18 from 20 (= 2)
Bring down the 7

Divide 6 into 27 (= 4)
Multiply 4 times 6 (= 24)
Subtract 24 from 27 (= 3)
Bring down the 2

Divide 6 into 32 (= 5)
Multiply 5 times 6 (= 30)
Subtract 30 from 32 (= 2)
Done. No more numbers to bring down.