

# 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)

$$2 \overline{) 8571578}$$

(2)

$$6 \overline{) 3687166}$$

(3)

$$6 \overline{) 5454743}$$

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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"

<p>(1)</p> $  \begin{array}{r}  4285789 \text{ R}0 \\  2 \overline{) 8571578} \\  \underline{- 8} \qquad (4 \times 2) \\  05 \\  \underline{- 4} \qquad (2 \times 2) \\  17 \\  \underline{- 16} \qquad (8 \times 2) \\  11 \\  \underline{- 10} \qquad (5 \times 2) \\  15 \\  \underline{- 14} \qquad (7 \times 2) \\  17 \\  \underline{- 16} \qquad (8 \times 2) \\  18 \\  \underline{- 18} \qquad (9 \times 2) \\  \text{Remainder -->} \quad 0  \end{array}  $ <p>Divide, Multiply, Subtract, Bring down, Repeat</p> <p>Divide 2 into 8 (= 4)            Multiply 4 times 2 (= 8)            Subtract 8 from 8 (= 0)            Bring down the 5</p> <p>Divide 2 into 05 (= 2)            Multiply 2 times 2 (= 4)            Subtract 4 from 05 (= 1)            Bring down the 7</p> <p>Divide 2 into 17 (= 8)            Multiply 8 times 2 (= 16)            Subtract 16 from 17 (= 1)            Bring down the 1</p> <p>Divide 2 into 11 (= 5)            Multiply 5 times 2 (= 10)            Subtract 10 from 11 (= 1)            Bring down the 5</p> <p>Divide 2 into 15 (= 7)            Multiply 7 times 2 (= 14)            Subtract 14 from 15 (= 1)            Bring down the 7</p> <p>Divide 2 into 17 (= 8)            Multiply 8 times 2 (= 16)            Subtract 16 from 17 (= 1)            Bring down the 8</p>	<p>(2)</p> $  \begin{array}{r}  614527 \text{ R}4 \\  6 \overline{) 3687166} \\  \underline{- 36} \qquad (6 \times 6) \\  08 \\  \underline{- 6} \qquad (1 \times 6) \\  27 \\  \underline{- 24} \qquad (4 \times 6) \\  31 \\  \underline{- 30} \qquad (5 \times 6) \\  16 \\  \underline{- 12} \qquad (2 \times 6) \\  46 \\  \underline{- 42} \qquad (7 \times 6) \\  \text{Remainder -->} \quad 4  \end{array}  $ <p>Divide, Multiply, Subtract, Bring down, Repeat</p> <p>Divide 6 into 36 (= 6)            Multiply 6 times 6 (= 36)            Subtract 36 from 36 (= 0)            Bring down the 8</p> <p>Divide 6 into 08 (= 1)            Multiply 1 times 6 (= 6)            Subtract 6 from 08 (= 2)            Bring down the 7</p> <p>Divide 6 into 27 (= 4)            Multiply 4 times 6 (= 24)            Subtract 24 from 27 (= 3)            Bring down the 1</p> <p>Divide 6 into 31 (= 5)            Multiply 5 times 6 (= 30)            Subtract 30 from 31 (= 1)            Bring down the 6</p> <p>Divide 6 into 16 (= 2)            Multiply 2 times 6 (= 12)            Subtract 12 from 16 (= 4)            Bring down the 6</p> <p>Divide 6 into 46 (= 7)            Multiply 7 times 6 (= 42)            Subtract 42 from 46 (= 4)            Done. No more numbers to bring down.</p>	<p>(3)</p> $  \begin{array}{r}  909123 \text{ R}5 \\  6 \overline{) 5454743} \\  \underline{- 54} \qquad (9 \times 6) \\  05 \\  \underline{- 0} \qquad (0 \times 6) \\  54 \\  \underline{- 54} \qquad (9 \times 6) \\  07 \\  \underline{- 6} \qquad (1 \times 6) \\  14 \\  \underline{- 12} \qquad (2 \times 6) \\  23 \\  \underline{- 18} \qquad (3 \times 6) \\  \text{Remainder -->} \quad 5  \end{array}  $ <p>Divide, Multiply, Subtract, Bring down, Repeat</p> <p>Divide 6 into 54 (= 9)            Multiply 9 times 6 (= 54)            Subtract 54 from 54 (= 0)            Bring down the 5</p> <p>Divide 6 into 05 (= 0)            Multiply 0 times 6 (= 0)            Subtract 0 from 05 (= 5)            Bring down the 4</p> <p>Divide 6 into 54 (= 9)            Multiply 9 times 6 (= 54)            Subtract 54 from 54 (= 0)            Bring down the 7</p> <p>Divide 6 into 07 (= 1)            Multiply 1 times 6 (= 6)            Subtract 6 from 07 (= 1)            Bring down the 4</p> <p>Divide 6 into 14 (= 2)            Multiply 2 times 6 (= 12)            Subtract 12 from 14 (= 2)            Bring down the 3</p> <p>Divide 6 into 23 (= 3)            Multiply 3 times 6 (= 18)            Subtract 18 from 23 (= 5)            Done. No more numbers to bring down.</p>
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Divide 2 into 18 (= 9)  
 Multiply 9 times 2 (= 18)  
 Subtract 18 from 18 (= 0)  
 Done. No more numbers to bring down.