

# 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*

<div>(1)</div> <div>2 <math>\overline{)685424}</math></div>	<div>(2)</div> <div>4 <math>\overline{)166782}</math></div>	<div>(3)</div> <div>6 <math>\overline{)460528}</math></div>
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Also see our Worksheets and Walkthroughs video: "Division - Traditional Long Division Algorithm Method Word Problems"

<div>(1)</div> <div><div><div><div><div>342712</div><div>R0</div></div><div><div>2</div><div>685424</div></div><div><div><div><div>- 6</div><div>( 3 x 2 )</div></div><div><div>08</div><div>- 8</div><div>( 4 x 2 )</div><div>05</div><div>- 4</div><div>( 2 x 2 )</div><div>14</div><div>- 14</div><div>( 7 x 2 )</div><div>02</div><div>- 2</div><div>( 1 x 2 )</div><div>04</div><div>- 4</div><div>( 2 x 2 )</div></div><div>0</div></div></div><div>Remainder --&gt;</div></div><div>Divide, Multiply, Subtract, Bring down, Repeat</div><div>Divide 2 into 6 ( = 3 ) Multiply 3 times 2 ( = 6 ) Subtract 6 from 6 ( = 0 ) Bring down the 8  Divide 2 into 08 ( = 4 ) Multiply 4 times 2 ( = 8 ) Subtract 8 from 08 ( = 0 ) Bring down the 5  Divide 2 into 05 ( = 2 ) Multiply 2 times 2 ( = 4 ) Subtract 4 from 05 ( = 1 ) Bring down the 4  Divide 2 into 14 ( = 7 ) Multiply 7 times 2 ( = 14 ) Subtract 14 from 14 ( = 0 ) Bring down the 2  Divide 2 into 02 ( = 1 ) Multiply 1 times 2 ( = 2 ) Subtract 2 from 02 ( = 0 ) Bring down the 4  Divide 2 into 04 ( = 2 ) Multiply 2 times 2 ( = 4 ) Subtract 4 from 04 ( = 0 ) Done. No more numbers to bring down.</div></div></div>	<div>(2)</div> <div><div><div><div><div>41695</div><div>R2</div></div><div><div>4</div><div>166782</div></div><div><div><div><div>- 16</div><div>( 4 x 4 )</div></div><div><div>06</div><div>- 4</div><div>( 1 x 4 )</div><div>27</div><div>- 24</div><div>( 6 x 4 )</div><div>38</div><div>- 36</div><div>( 9 x 4 )</div><div>22</div><div>- 20</div><div>( 5 x 4 )</div></div><div>2</div></div></div><div>Remainder --&gt;</div></div><div>Divide, Multiply, Subtract, Bring down, Repeat</div><div>Divide 4 into 16 ( = 4 ) Multiply 4 times 4 ( = 16 ) Subtract 16 from 16 ( = 0 ) Bring down the 6  Divide 4 into 06 ( = 1 ) Multiply 1 times 4 ( = 4 ) Subtract 4 from 06 ( = 2 ) Bring down the 7  Divide 4 into 27 ( = 6 ) Multiply 6 times 4 ( = 24 ) Subtract 24 from 27 ( = 3 ) Bring down the 8  Divide 4 into 38 ( = 9 ) Multiply 9 times 4 ( = 36 ) Subtract 36 from 38 ( = 2 ) Bring down the 2  Divide 4 into 22 ( = 5 ) Multiply 5 times 4 ( = 20 ) Subtract 20 from 22 ( = 2 ) Done. No more numbers to bring down.</div></div></div>	<div>(3)</div> <div><div><div><div><div>76754</div><div>R4</div></div><div><div>6</div><div>460528</div></div><div><div><div><div>- 42</div><div>( 7 x 6 )</div></div><div><div>40</div><div>- 36</div><div>( 6 x 6 )</div><div>45</div><div>- 42</div><div>( 7 x 6 )</div><div>32</div><div>- 30</div><div>( 5 x 6 )</div><div>28</div><div>- 24</div><div>( 4 x 6 )</div></div><div>4</div></div></div><div>Remainder --&gt;</div></div><div>Divide, Multiply, Subtract, Bring down, Repeat</div><div>Divide 6 into 46 ( = 7 ) Multiply 7 times 6 ( = 42 ) Subtract 42 from 46 ( = 4 ) Bring down the 0  Divide 6 into 40 ( = 6 ) Multiply 6 times 6 ( = 36 ) Subtract 36 from 40 ( = 4 ) Bring down the 5  Divide 6 into 45 ( = 7 ) Multiply 7 times 6 ( = 42 ) Subtract 42 from 45 ( = 3 ) Bring down the 2  Divide 6 into 32 ( = 5 ) Multiply 5 times 6 ( = 30 ) Subtract 30 from 32 ( = 2 ) Bring down the 8  Divide 6 into 28 ( = 4 ) Multiply 4 times 6 ( = 24 ) Subtract 24 from 28 ( = 4 ) Done. No more numbers to bring down.</div></div></div>
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