Short Division with Remainders

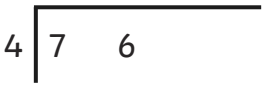
The Short Method for Division

74 ÷ 4 =

1. Draw this out neatly with a ruler. It looks a bit like a bus stop, so the written method for division is sometimes known as the 'Bus Stop' method.

2. Write the number you are dividing by, the **divisor**, in front of the vertical line.

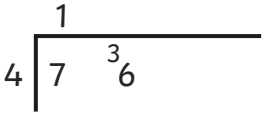
3. Write the number that is being divided, the **dividend**, on the right-hand side of the vertical line.



4. The answer will go on top of the vertical line.

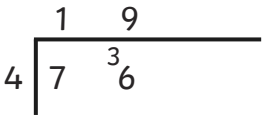
Step 1

Share 7 tens into four groups. There is 1 ten in each group with 3 tens left over. We write the 1 above the line and regroup the remaining 3 tens into 30 ones, moving this to the next column.



Step 2

How many 4s are there in 36? There are 9 exactly, so we write this above the line.

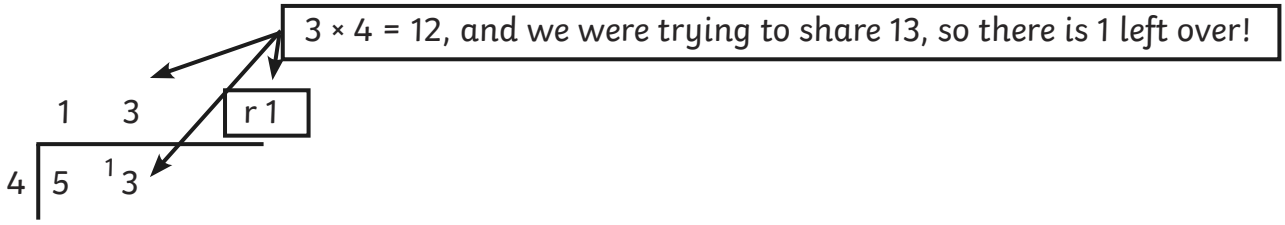


Short Division with Remainders

Remainders

53 ÷ 4 = **13 r1**

1. Share 5 tens into 4 groups. There is 1 ten in each group with 1 ten left over. We write the 1 above the line and regroup the left over ten onto the next column to make 13.
2. Share 13 into 4 groups? We can make 4 groups of 3, so we write 3 above the bus stop.
3. There is 1 left over. This is a remainder. So we write r1 on the line.



Short Division with Remainders

I can use the short written method for division where there are remainders (two-digit numbers).

1. Can you use the written method for division to calculate the answers to these questions?

a. 56 ÷ 4 = _____ **b.** 48 ÷ 3 = _____ **c.** 96 ÷ 6 = _____

d. 110 ÷ 5 = _____ **e.** 136 ÷ 8 = _____

2. Now try these. They have **remainders.**

a. 27 ÷ 5 = _____ **b.** 49 ÷ 4 = _____ **c.** 74 ÷ 6 = _____

d. 34 ÷ 3 = _____ **e.** 67 ÷ 9 = _____

Answers

1. Can you use the written method for division to calculate the answers to these questions?

   a) 56 ÷ 4 = **14**

   b) 48 ÷ 3 = **16**

   c) 96 ÷ 6 = **16**

   d) 110 ÷ 5 = **22**

   e) 136 ÷ 8 = **17**

2. Now try these. They have remainders. (use the correct symbol to represent 'r' for remainder)

   a) 27 ÷ 5 = **5r2**

   b) 49 ÷ 4 = **12r1**

   c) 74 ÷ 6 = **12r2**

   d) 34 ÷ 3 = **11r1**

   e) 67 ÷ 9 = **7r4**

Short Division with Remainders

I can use the short written method for division where there are remainders (two-digit numbers).

1. Use the short method of division to calculate your answers. You can do it!

   a. 73 ÷ 5 = _____ **b.** 57 ÷ 4 = _____ **c.** 92 ÷ 3 = _____

   d. 99 ÷ 8 = _____ **e.** 77 ÷ 6 = _____

2. Well done! Now try these three-digit calculations.

   a. 379 ÷ 3 = _____ **b.** 649 ÷ 9 = _____ **c.** 483 ÷ 4 = _____

   d. 114 ÷ 5 = _____ **e.** 704 ÷ 6 = _____

Short Division with Remainders

3. How can you identify multiples of 5? Use what you know about multiples of 5 to predict whether these division calculations will have a remainder. Calculate the answers to see if you were correct.

a. 2466 ÷ 5 = _____

☐ I think there will be a remainder.

☐ I think there won't be a remainder.

b. 3942 ÷ 5 = _____

☐ I think there will be a remainder.

☐ I think there won't be a remainder.

a. 7260 ÷ 5 = _____

☐ I think there will be a remainder.

☐ I think there won't be a remainder.

Answers

1. Use the short method of division to calculate your answers. You can do it!

   a) 73 ÷ 5 = **14r3**

   b) 57 ÷ 4 = **14r1**

   c) 92 ÷ 3 = **30r2**

   d) 99 ÷ 8 = **12r3**

   e) 77 ÷ 6 = **12r5**

2. Well done! Now try these three-digit calculations.

   a) 379 ÷ 3 = **126r1**

   b) 649 ÷ 9 = **72r1**

   c) 483 ÷ 4 = **120r3**

   d) 114÷ 5 = **22r4**

   e) 704 ÷ 6 = **117r2**

3. How can you identify multiples of 5? They end in 0 or 5. Use what you know about multiples of 5 to predict whether these division calculations will have a remainder. Calculate the answers to see if you were correct.

   a) 2465 ÷ 5 = **493 no remainder**

   b) 3942 ÷ 5 = **788r2**

   c) 7260 ÷ 5 = **1452 no remainder**

Short Division with Remainders

I can use the short written method for division where there are remainders (two-digit numbers).

1. Use the short method of division to calculate your answers. You can do it!

   a. 73 ÷ 5 = _____ **b.** 57 ÷ 4 = _____ **c.** 92 ÷ 3 = _____

   d. 99 ÷ 8 = _____ **e.** 77 ÷ 6 = _____

2. Well done! Now try these three-digit calculations.

   a. 379 ÷ 3 = _____ **b.** 649 ÷ 9 = _____ **c.** 483 ÷ 4 = _____

   d. 114 ÷ 5 = _____ **e.** 704 ÷ 6 = _____

Short Division with Remainders

3. Can you do these? When you divide by 12, you may have to exchange two-digit numbers.

a. 220 ÷ 12 = _____ **b.** 267 ÷ 12 = _____ **c.** 422 ÷ 12 = _____

d. 328 ÷ 12 = _____ **e.** 462 ÷ 12 = _____

Answers

1. Use the short method of division to calculate your answers. You can do it!

   a) 73 ÷ 5 = **14r3**

   b) 57 ÷ 4 = **14r1**

   c) 92 ÷ 3 = **30r2**

   d) 99 ÷ 8 = **12r3**

   e) 77 ÷ 6 = **12r5**

2. Well done! Now try these three-digit calculations.

   a) 379 ÷ 3 = **126r1**

   b) 649 ÷ 9 = **72r1**

   c) 483 ÷ 4 = **120r3**

   d) 114÷ 5 = **22r4**

   e) 704 ÷ 6 = **117r2**

3. Can you do these? When you divide by 12, you may have to exchange two-digit numbers.

   a) 220 ÷ 12 = **18r4**

   b) 267 ÷ 12 = **22r3**

   c) 422 ÷ 12 = **35r2**

   d) 328 ÷ 12 = **27r4**

   e) 462 ÷ 12 = **38r6**