



## Learning Reminders

Use short division to divide 4-digit numbers by 1-digit numbers; Divide remainders to give fractions/decimals, round up or down.

$$2537 \div 3$$

$$3 \overline{) 2537}$$

? About how many 3s are in 2537?

$800 \times 3 = 2400$ ,  
so the answer  
must be a bit  
more than 800.

## Learning Reminders

We are going to move a sticky note along to hide and reveal each column in turn.

$$3 \overline{) 2 \square \square \square}$$

How many 3s in 2? None, so move the sticky.

8, and 1 left over.  
We write 8 in the 100s column as we are dividing the 100s, then 1 hundred in front of the 10s digit.

$$8 \quad 3 \overline{) 25 \square \square}$$

How many 3s in 25?

4, and 1 left over.  
We write 4 in the 10s column as we are dividing the 10s, then 1 ten in front of the 1s digit.

$$84 \quad 3 \overline{) 251 \square}$$

How many 3s in 13?

5, and 2 left over.  
We write 5 in the 1s column.

$$845 \text{ r } 2 \quad 3 \overline{) 251317}$$

How many 3s in 17?

We can divide the remainder 2 by 3.

The exact answer is  $845\frac{2}{3}$ .

## Learning Reminders

Use short division to divide 4-digit numbers by 1-digit numbers; Divide remainders to give fractions/decimals, round up or down.

One answer needs us to round up, one to round down the answer, another to divide the remainder to give a fraction and another to write the equivalent decimal.

1. How many whole weeks are there in 365 days?
2. How many packets of 4 chocolate bars can be made using 535 bars?
3. How many boxes of 6 eggs must be bought if we need 253 eggs?
4. A piece of material 562cm long is used to make curtains. It is cut into 4 equal lengths. How long is each curtain?

Round down.

Give remainder as a fraction.

Round up.

Give remainder as a decimal.

## Practice Sheet Mild

### Short division

Divide any remainders to give fractions.

1.  $733 \div 3$
2.  $946 \div 6$
3.  $4783 \div 4$
4.  $6326 \div 4$
5.  $3142 \div 4$
6.  $3784 \div 5$
7. Exactly how many weeks are there in 365 days?
8. How many packs of 4 chocolate bars can be made using 535 bars?
9. How many packs of 6 eggs need to be bought if 253 eggs are needed?
10. If a piece of material measuring 562cm long is divided into 4 equal lengths to make curtains, how long is each length?

## Practice Sheet Hot

### Short division

Divide any remainders to give fractions.

1.  $7133 \div 3$
2.  $1946 \div 6$
3.  $3183 \div 4$
4.  $9326 \div 7$
5.  $2442 \div 11$
6.  $4752 \div 11$
7.  $3784 \div 12$
8.  $9524 \div 12$
9. There are 12 months in a year, 365 days. If each month was an equal number of days, exactly how many days would there be in a month? How long would each month be in a leap year of 366 days?
10. How many packs of 5 chocolate bars can be made using 1453 bars?
11. How many packs of 12 eggs need to be bought if 253 eggs are needed?
12. If a piece of material measuring 962cm long is divided into 8 equal lengths to make curtains, how long is each length?

Use multiplication to check three of your answers. What do you need to do with the remainder?

## Practice Sheet Answers

### Short division (mild)

1.  $733 \div 3 = 244 \frac{1}{3}$
2.  $946 \div 6 = 157 \frac{2}{3}$
3.  $4783 \div 4 = 1195 \frac{3}{4}$
4.  $6326 \div 4 = 1581 \frac{1}{2}$
5.  $3142 \div 4 = 785 \frac{1}{2}$
6.  $3784 \div 5 = 756 \frac{4}{5}$
7.  $365 \div 7 = 52 \frac{1}{7}$
8.  $535 \div 4 = 133 \frac{3}{4}$
9.  $253 \div 6 = 42 \frac{1}{6}$  43 packs of eggs must be bought
10.  $562 \div 4 = 140 \frac{1}{2}$  cm

### Short division (hot)

1.  $7133 \div 3 = 2377 \frac{2}{3}$
2.  $1946 \div 6 = 324 \frac{1}{3}$
3.  $3183 \div 4 = 795 \frac{3}{4}$
4.  $9326 \div 7 = 1332 \frac{2}{7}$
5.  $2442 \div 11 = 222$
6.  $4752 \div 11 = 432$
7.  $3784 \div 12 = 315 \frac{4}{12}$  ( $315 \frac{1}{3}$ )
8.  $9524 \div 12 = 793 \frac{8}{12}$  ( $793 \frac{2}{3}$ )
9.  $365 \div 12 = 30 \frac{5}{12}$   $366 \div 12 = 30 \frac{6}{12}$  ( $30 \frac{1}{2}$ )
10.  $1453 \div 5 = 290 \frac{3}{5}$  packs
11.  $253 \div 12 = 21 \frac{1}{12}$  packs 22 packs need to be bought
12.  $962 \div 8 = 120 \frac{2}{8}$  cm ( $120 \frac{1}{4}$  cm)

## A Bit Stuck? Any left?

### Work in pairs

#### What to do:

1. Calculate the answers to:

$$10 \times 5 = \quad 20 \times 5 = \quad 30 \times 5 = \quad 40 \times 5 = \quad 50 \times 5 = \quad 60 \times 5 = \quad 70 \times 5 = \quad 80 \times 5 = \quad 90 \times 5 = \quad 100 \times 5 =$$

Now use your answers to help work out the answers to at least two of these divisions.

You score 10 points for each correct answer BUT you will score 10 bonus points if the division has a remainder.

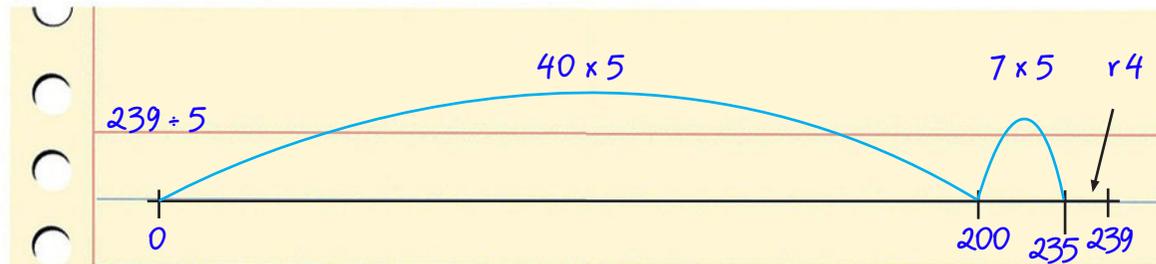
$239 \div 5$

$162 \div 5$

$365 \div 5$

$235 \div 5$

$414 \div 5$



2. Calculate the answers to:

$$10 \times 4 = \quad 20 \times 4 = \quad 30 \times 4 = \quad 40 \times 4 = \quad 50 \times 4 = \quad 60 \times 4 = \quad 70 \times 4 = \quad 80 \times 4 = \quad 90 \times 4 = \quad 100 \times 4 =$$

Now use your answers to help work out the answers to at least two of these divisions.

You score 10 points for each correct answer BUT you will score 10 bonus points if the division has a remainder.

$143 \div 4$

$249 \div 4$

$326 \div 4$

$371 \div 4$

$208 \div 4$

### ***S-t-r-e-t-c-h:***

Use chunking to work out  $254 \div 6$  and  $378 \div 6$ .  
What multiplication facts could you list to help?

### Learning outcomes:

- I can use chunking to divide, using lists of multiples of 10 of the divisor to help.
- I am beginning to write my own lists of multiples to help.



### Things you will need:

- A pencil

## Check your understanding

### Questions

If Sally multiplies a number by 12 she gets 9,432. What was her starting number?

Tom multiplies his number by 9 and gets 7074. What was his starting number?

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Calculate  $1575 \div 6$ .

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- A piece of ribbon 1575cm long is cut into six equal pieces. How long is each piece?
- 1575 eggs are needed to make breakfast at a hotel. The eggs are in boxes of 6. Exactly how many boxes of eggs will be used?
- The school needs 1575 pens. The pens come in packs of 6. How many packs need to be bought?
- There are 1575 oranges. They are put into bags of 6 oranges. How many bags can be packed?

*Fold here to hide answers*

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## Check your understanding

### Answers

If Sally multiplies a number by 12 she gets 9,432. What was her starting number? **786.**

Tom multiplies his number by 9 and gets 7074. What was his starting number? **786.**

**Solved by division – for some children ‘multiplies’ is a trigger to do just that, rather than the division (as the reverse of multiplication) needed to solve these.**

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Calculate  $1575 \div 6$ .

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- A piece of ribbon 1575cm long is cut into six equal pieces. How long is each piece? **262.5cm**
- 1575 eggs are needed to make breakfast at a hotel. The eggs are in boxes of 6. Exactly how many boxes of eggs will be used?  **$262\frac{1}{2}$**
- The school needs 1575 pens. The pens come in packs of 6. How many packs need to be bought? **263**
- There are 1575 oranges. They are put into bags of 6 oranges. How many bags can be packed? **262**