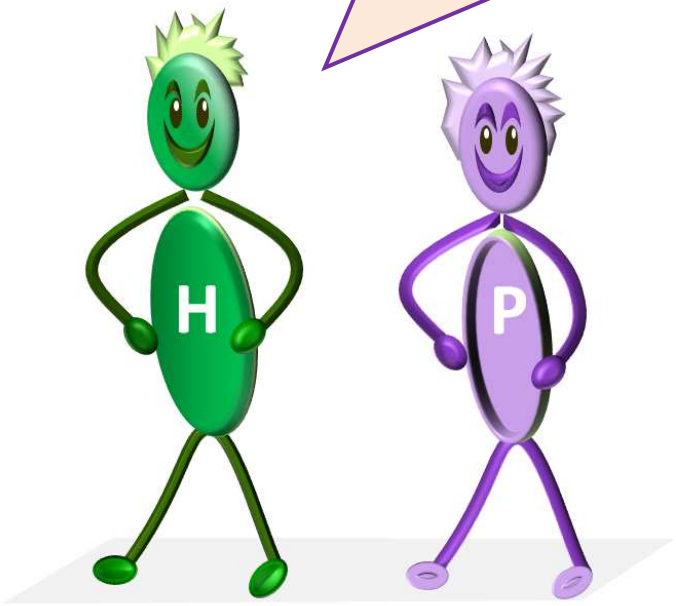
Henry and Poppy have fun with **Division**

Year 3 to Year 4 maths

We had fun making these questions for you. Enjoy them.



CONTENT

Year 3:

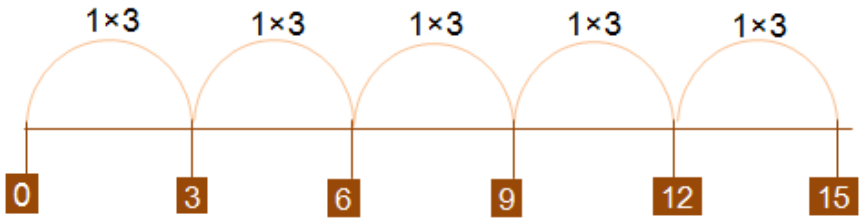
- Division by counting down on a number line for division facts 2, 3, 4, 5, 8 and 10
- Division by counting down on a number line with a remainder, division facts 2, 3, 4, 5, 8 and 10
- Problem Solving

Year 4:

- Division by chunking up on a number line (not just 3 but 10×3 = 30) with **one** chunk exactly
- Division by chunking up on a number line) with **more than one** chunk (not just 10×3 but 10×3+10×3 = 60)
- Division by chunking up on a number line) with more than one chunk (not just 10×3 but 10×3+10×3 = 60) with a remainder
- Short division exact answer
- Problem Solving

1

Counting up (or down) on a number line



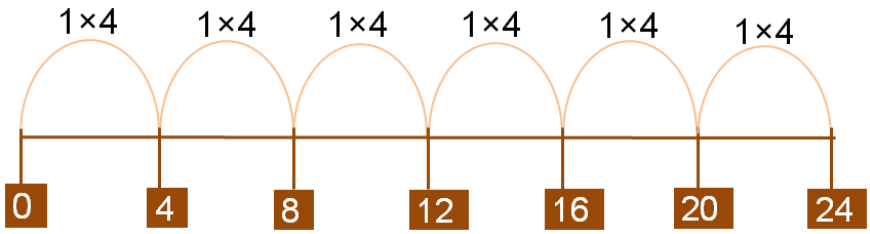
$15 \div 3 =$

1 mark

Year-3-DIVISION: Counting up on a number line using division by 2, 3, 4, 5, 8 and 10

2

Counting up on a number line



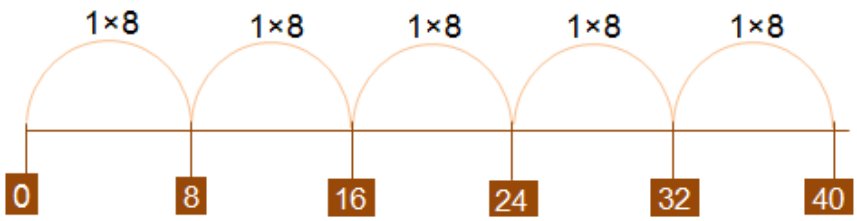
$24 \div 4 =$

1 mark

Year-3-DIVISION: Counting up on a number line using division by 2, 3, 4, 5, 8 and 10

3

Counting up the number line



$40 \div 8 =$

1 mark

Year-3-DIVISION: Counting up on a number line using division by 2, 3, 4, 5, 8 and 10

4

Count up the number line to work out

$24 \div 3 =$

1 mark

Year-3-DIVISION: Counting up on a number line using division by 2, 3, 4, 5, 8 and 10

5 Count up the number line to work out

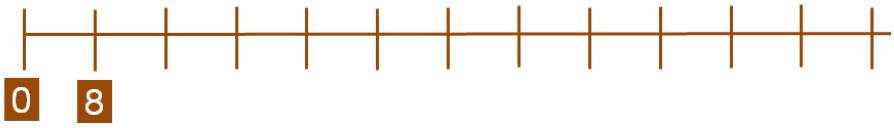
$36 \div 4 =$

1 mark

Year-3-DIVISION: Counting up on a number line using division by 2, 3, 4, 5, 8 and 10

6 Count up the number line to work out

$24 \div 8 =$



1 mark

Year-3-DIVISION: Counting up on a number line using division by 2, 3, 4, 5, 8 and 10

7 Count up the number line to work out

$33 \div 3 =$

1 mark

Year-3-DIVISION: Counting up on a number line using division by 2, 3, 4, 5, 8 and 10

8

Count up the number line to work out

$56 \div 8 =$

1 mark

Year-3-DIVISION: Counting up on a number line using division by 2, 3, 4, 5, 8 and 10

9

Count up the number line to work out

$45 \div 5 =$

1 mark

Year-3-DIVISION: Counting up on a number line using division by 2, 3, 4, 5, 8 and 10

10

Count up the number line to work out

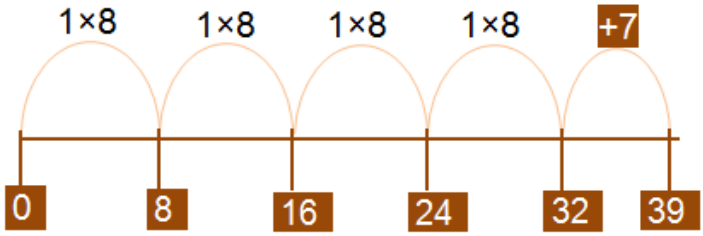
$72 \div 8 =$

1 mark

Year-3-DIVISION: Counting up on a number line using division by 2, 3, 4, 5, 8 and 10

1

Counting up on a number line with a remainder



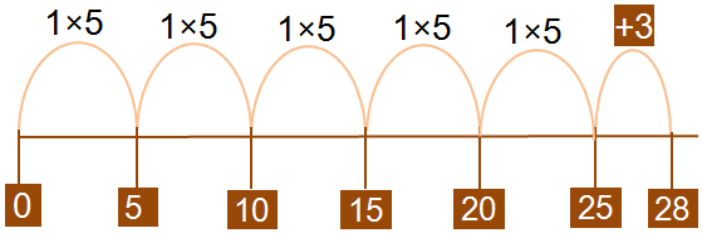
$39 \div 8 =$

1 mark

Year-3-DIVISION: Counting up on a number line using division by 2, 3, 4, 5, 8 and 10 with a remainder

2

Counting up on a number line with a remainder

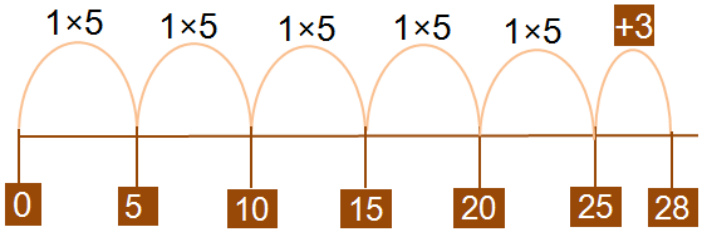


$28 \div 5 =$

1 mark

Year-3-DIVISION: Counting up on a number line using division by 2, 3, 4, 5, 8 and 10 with a remainder

3 Counting up on a number line with a remainder



$28 \div 5 =$

1 mark

Year-3-DIVISION: Counting up on a number line using division by 2, 3, 4, 5, 8 and 10 with a remainder

4 Counting up on a number line with a remainder

$32 \div 3 =$

1 mark

Year-3-DIVISION: Counting up on a number line using division by 2, 3, 4, 5, 8 and 10 with a remainder

5 Counting up on a number line with a remainder

$33 \div 4 =$

1 mark

Year-3-DIVISION: Counting up on a number line using division by 2, 3, 4, 5, 8 and 10 with a remainder

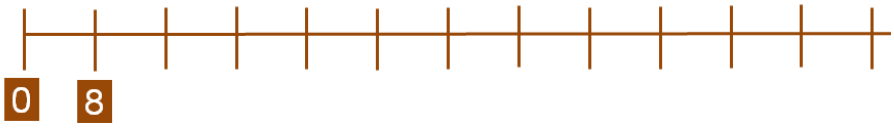
6 Counting up on a number line with a remainder

$47 \div 5 =$

1 mark

Year-3-DIVISION: Counting up on a number line using division by 2, 3, 4, 5, 8 and 10 with a remainder

7 Counting up on a number line with a remainder



$63 \div 8 =$

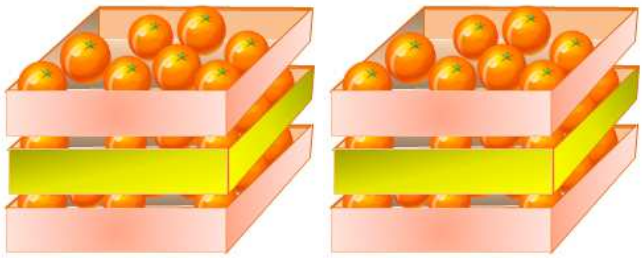
1 mark

Year-3-DIVISION: Counting up on a number line using division by 2, 3, 4, 5, 8 and 10 with a remainder

1

There are 48 oranges altogether

There are 6 trays with the same number of oranges



How many oranges are in each tray

1 mark

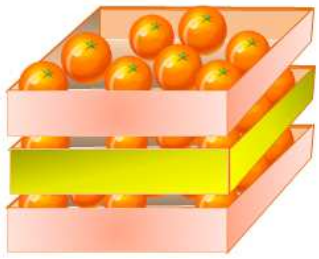
Year-3 DIVISION: Problem solve

2

It costs 240p for these oranges

Each tray has 8 oranges.

There are 3 trays in a stack



How much does an orange cost in pence

1 mark

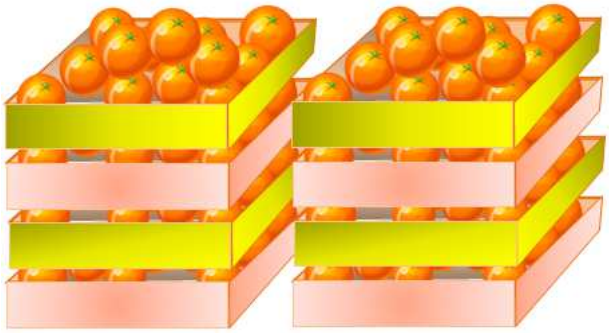
Year-3 DIVISION: Problem solve

3

Altogether there are 96 oranges

There are 4 trays in a stack

There are two stacks



How many oranges are there in one tray.

1 mark

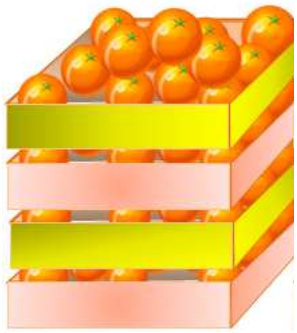
Year-3 DIVISION: Problem solve

4

It costs 480p for these oranges

There are 4 trays in a stack

Each orange costs 10p



How many oranges are in one tray

1 mark

Year-3 DIVISION: Problem solve

5

These bananas cost 320 pence

There are eight bananas in each box

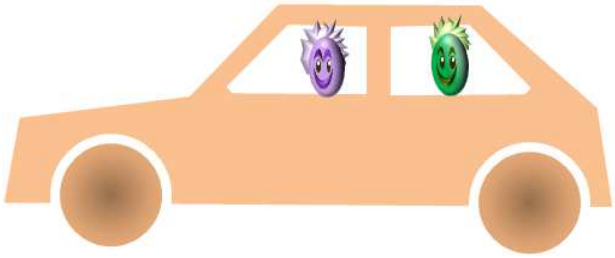
How much does one banana cost in pence

1 mark

Year-3 DIVISION: Problem solve

6 Henry and Poppy went for a car ride.

The speed of the car was 45 mile every hour

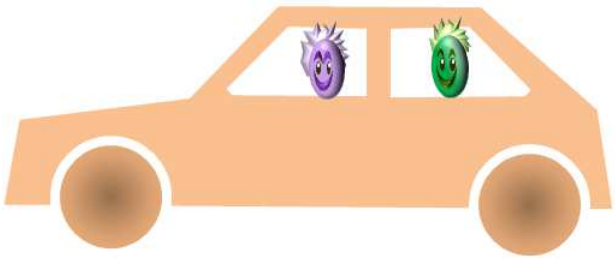


How long did it take to do 90 miles in hours

1 mark

Year-3 DIVISION: Problem solve

7 Henry and Poppy went for a car ride.
They travelled 150 miles in 3 hours.



What was the speed of the car in miles per hour

1 mark

Year-3 DIVISION: Problem solve

1

Henry how do you do
How many 5's go into 65
or **65 ÷ 5**

You can use chunks to do this

10 chunks of 5's is 50
That leaves 15 over

Then **3** chunks of 5 is 15

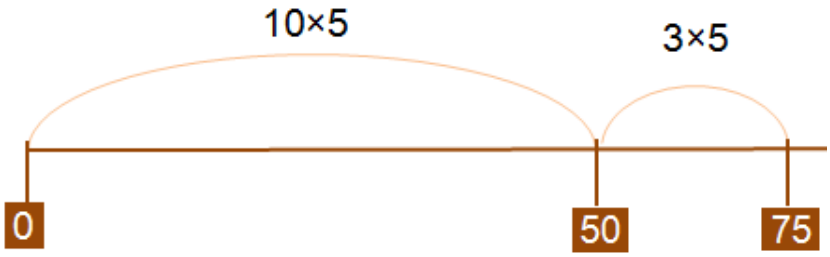
so 65 ÷ 5 = 10+3 = 13

Year-4-DIVISION: Counting up on a number line using one 10 chunk of ...' then '...chunks of ... division by 2, 3, 4, 5, 8 and 10

2

Let's do chunking for 65 ÷ 5 on a number line

We have
10 chunks of 5 then 3 chunks of 5



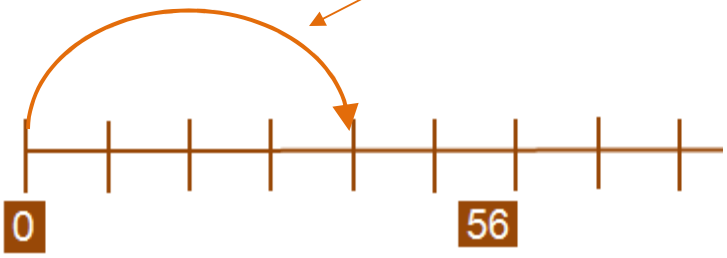
65 ÷ 5 = 13

Year-4-DIVISION: Counting up on a number line using one 10 chunk of ...' then '...chunks of ... division by 2, 3, 4, 5, 8 and 10

3

Let's do 56 ÷ 4 by chunking on a number line

10 chunks of 4 = 40 so do that jump first.



You need another 16 so that's **4** more chunks of 4

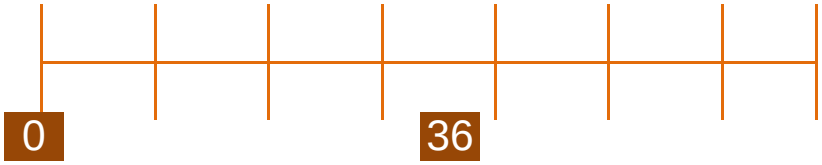
Use 10 chunks of ..**4**.. then 4 chunks of ..**4**..

56 ÷ 4 = 14

Year-4-DIVISION: Counting up on a number line using one 10 chunk of ...' then '...chunks of ... division by 2, 3, 4, 5, 8 and 10

4 On the number line use chunks of 2 to work out

$36 \div 3 =$



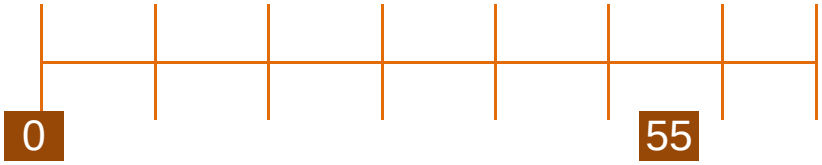
Use 10 chunks of **3,** then ___ chunks of **3**

1 mark

Year-4-DIVISION: Counting up on a number line using one 10 chunk of ...' then '...chunks of ... division by 2, 3, 4, 5, 8 and 10

5 On the number line use chunks of 5 to work out

$55 \div 5 =$



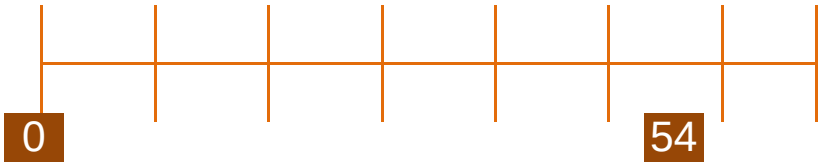
Use ___ chunks of **5,** then ___ chunks of **5**

1 mark

Year-4-DIVISION: Counting up on a number line using one 10 chunk of ...' then '...chunks of ... division by 2, 3, 4, 5, 8 and 10

6 On the number line use chunks of 3 to work out

$54 \div 3 =$



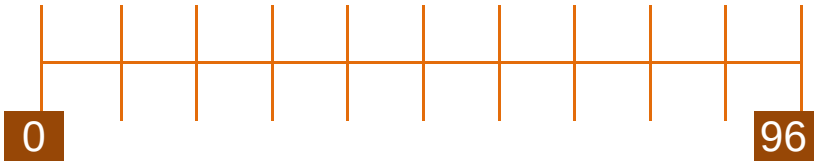
Use ___ chunks of **3** then ___ chunks of 3

1 mark

Year-4-DIVISION: Counting up on a number line using one 10 chunk of ...' then '...chunks of ... division by 2, 3, 4, 5, 8 and 10

7 On the number line use chunks of 8 to work out

$96 \div 8 =$



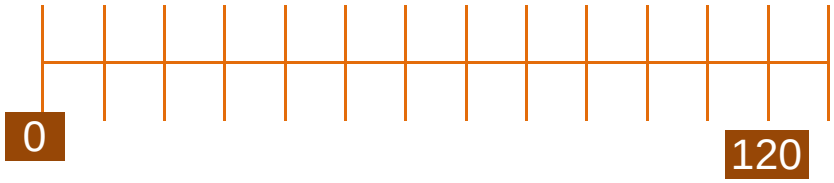
Use ___ chunks of **8** then ___ chunks of ..8..

1 mark

Year-4-DIVISION: Counting up on a number line using one 10 chunk of ...' then '...chunks of ... division by 2, 3, 4, 5, 8 and 10

8 On the number line use chunks of 10 to work out

$120 \div 10 =$

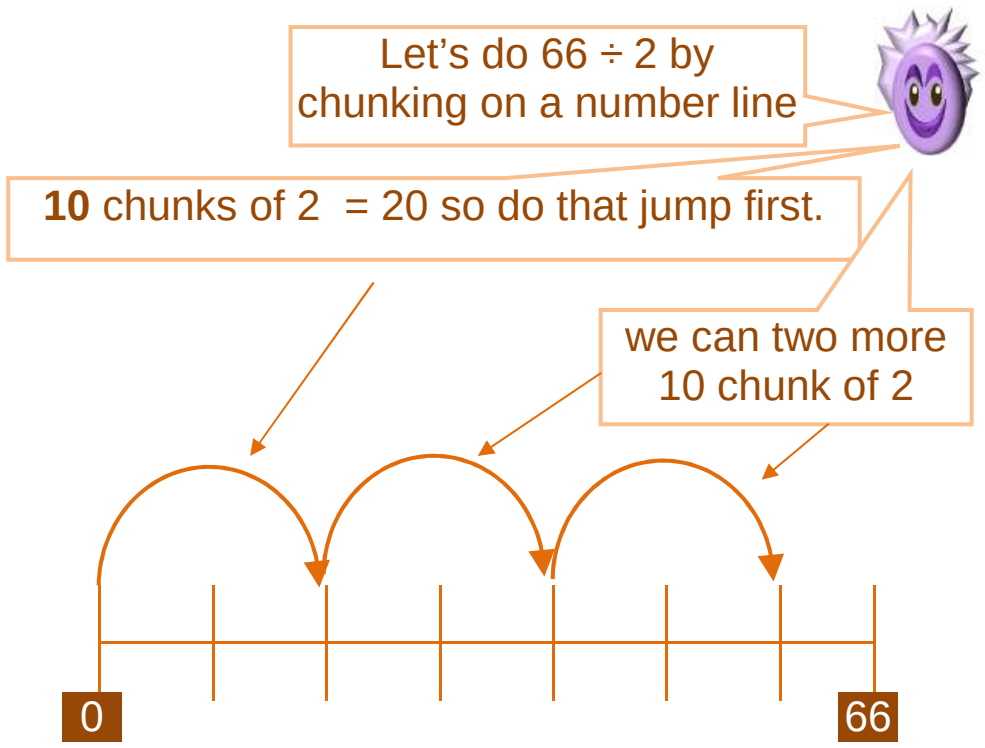


Use ___ chunks of **10** then ___ chunks of 10

1 mark

Year-4-DIVISION: Counting up on a number line using one 10 chunk of ...' then '...chunks of ... division by 2, 3, 4, 5, 8 and 10

1



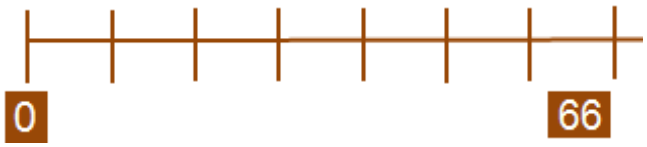
Use three , 10 chunks of **2** then 3 chunks of 2

$$66 \div 2 = 33$$

Year-4-DIVISION: Division by chunking up on a number line) with **more than one** chunk (not just 10×3 but 10×3+10×3 = 60)

2 On the number line use chunks of 3 to work out

$66 \div 3 =$



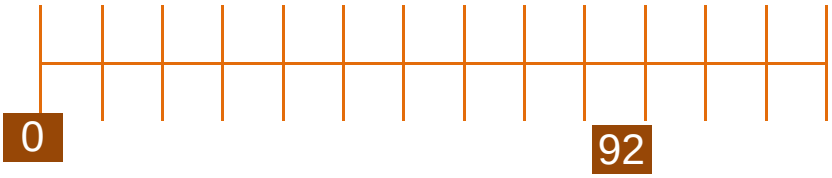
Use ____ 10 chunks of **3** then ___ chunks of 3

1 mark

Year-4-DIVISION: Division by chunking up on a number line) with **more than one** chunk (not just 10×3 but 10×3+10×3 = 60)

3 On the number line use chunks of 4 to work out

$92 \div 4 =$



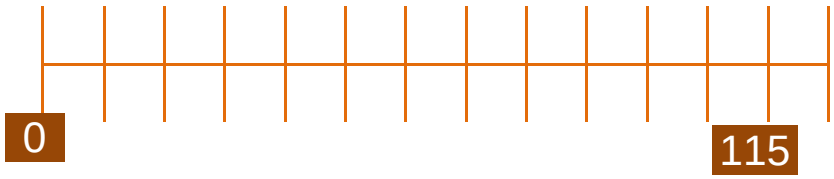
Use ____ , 10 chunks of **4** then __ chunks of 4

1 mark

Year-4-DIVISION: Division by chunking up on a number line) with **more than one** chunk (not just 10×3 but 10×3+10×3 = 60)

4 On the number line use chunks of 5 to work out

$115 \div 5 =$



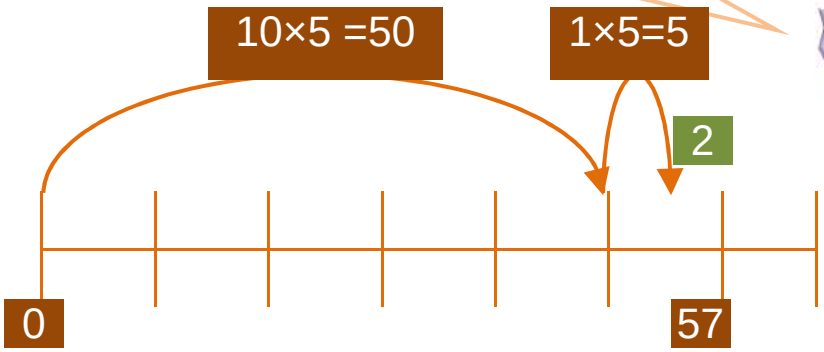
Use ____ , 10 chunks of **5** then __ chunks of 5

1 mark

Year-4-DIVISION: Division by chunking up on a number line) with **more than one** chunk (not just 10×3 but 10×3+10×3 = 60)

1

If you do **57 ÷ 5** it won't go exactly and you get a **remainder**.



10 chunks of 5's is 50
That leaves 6 over

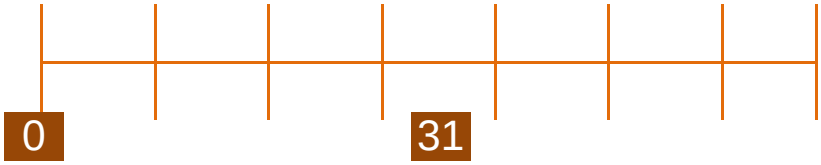
That's one more chunk of 5
then 2 left over

57 ÷ 5 = 11 **r** 2

Year-4-DIVISION: Counting up on a number line using one 10 chunk of ...' then '...chunks of ... division by 2, 3, 4, 5, 8 and 10 with a remainder

2 On the number line use chunks of 2 to work out

$31 \div 2 =$



Use ___ chunks of **2** then ___ chunks of **2** with a remainder ___

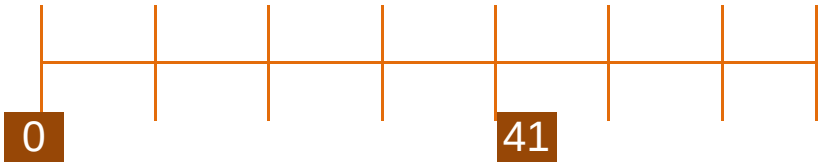
r

1 mark

Year-4-DIVISION: Counting up on a number line using one 10 chunk of ...' then '...chunks of ... division by 2, 3, 4, 5, 8 and 10 with a remainder

3 On the number line use chunks of 3 to work out

$41 \div 3 =$



Use ___ chunks of **3** then ___ chunks of **3** with a remainder ___

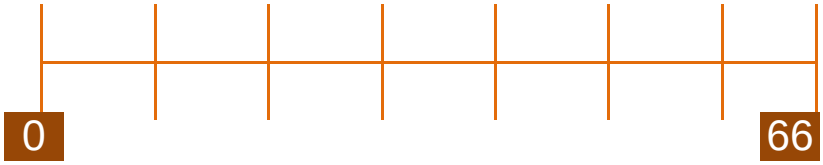
r

1 mark

Year-4-DIVISION: Counting up on a number line using one 10 chunk of ...' then '...chunks of ... division by 2, 3, 4, 5, 8 and 10 with a remainder

4 On the number line use chunks of 4 to work out

$66 \div 4 =$



Use ___ chunks of **4** then ___ chunks of 4 with a remainder ___

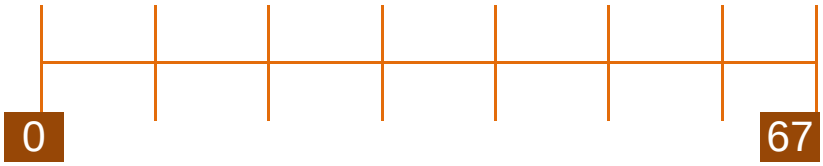
r

1 mark

Year-4-DIVISION: Counting up on a number line using one 10 chunk of ...' then '...chunks of ... division by 2, 3, 4, 5, 8 and 10 with a remainder

5 On the number line use chunks of 5 to work out

$67 \div 5 =$



Use ___ chunks of **5** then ___ chunk of **5** with a remainder ___

r

1 mark

Year-4-DIVISION: Counting up on a number line using one 10 chunk of ...' then '...chunks of ... division by 2, 3, 4, 5, 8 and 10 with a remainder

6 On the number line use chunks of 5 to work out

$$93 \div 5 =$$

Use ___ chunks of **5** then ___ chunks of 5 with a remainder ___

r

1 mark

Year-4-DIVISION: Counting up on a number line using one 10 chunk of ...' then '...chunks of ... division by 2, 3, 4, 5, 8 and 10 with a remainder

7 On the number line use chunks of 8 to work out

$$124 \div 8 =$$

Use ___ chunks of **8** then ___ chunks of 8 with a remainder ___

r

1 mark

Year-4-DIVISION: Counting up on a number line using one 10 chunk of ...' then '...chunks of ... division by 2, 3, 4, 5, 8 and 10 with a remainder

8 On the number line use chunks of 10 to work out

$$124 \div 10 =$$

Use ___ chunks of 10 then ___ chunks of 10

with a remainder ___

r

1 mark

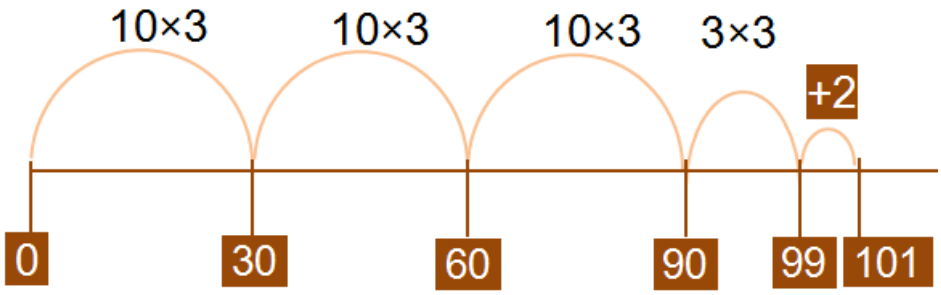
Year-4-DIVISION: Counting up on a number line using one 10 chunk of ...' then '...chunks of ... division by 2, 3, 4, 5, 8 and 10 with a remainder

9

On the number line use chunks of 3 to work out

$101 \div 3 =$

Use more than one 10 chunks of ..... then ..... chunks of ..... and a **remainder**



Use more than one 10 chunk of 3

then 3 chunks of 3 with remainder 2

$101 \div 3 =$

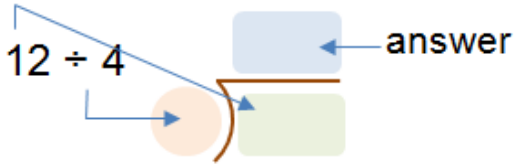
33 **r** 3

Year-4-DIVISION: Counting up on a number line using one 10 chunk of ...' then '...chunks of ... division by 2, 3, 4, 5, 8 and 10 with a remainder

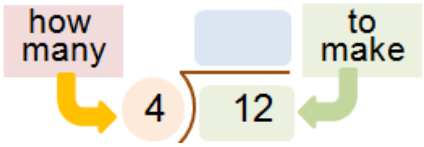
1

Share 12 stickers between 4 of Henry's friends

This is 12 ÷ 4 and we write it like this in a bus-stop



and say ...



we need three 4's

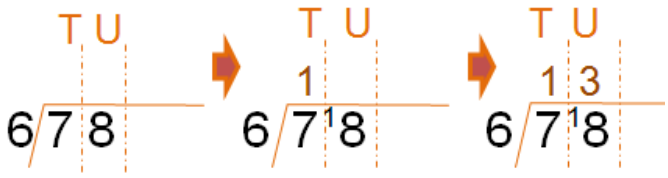
$$4\overline{)12} = 3 \text{ exactly}$$

3

Year 4-DIVISION Short Division (Bus stop) with Exact Answer

2

78 ÷ 6 using short division bus stop method



7 divided by 6 is 1 remainder 1

Carry the 1 to the 8

18 divided by 6 is 3 with no remainder

13

Year 4-DIVISION Short Division (Bus stop) with Exact Answer

3

Start like this	$7\overline{)224}$
Will 7 go into 2? - NO	$7\overline{)224}$
Try the next two digits Will 7 go into 22? YES	$7\overline{)224}$
How many times will 7 go into 22? Three: 3 x 7 = 21 Put 3 at the top.	$\begin{array}{r}3\\7\overline{)224}\end{array}$
Is there a remainder YES : 22 – 21 = 1. Put 1 before the 4	$\begin{array}{r}3\\7\overline{)22^{1}4}\end{array}$
Will 7 go into 14 YES: twice 7 x 2 = 14 Put 2 at the top	$\begin{array}{r}32\\7\overline{)22^{1}4}\end{array}$
There is no remainder So we have finished	

Year 4-DIVISION Short Division (Bus stop) with Exact Answer

4 65 ÷ 5 using short division bus stop method

1 mark

Year 4-DIVISION Short Division (Bus stop) with Exact Answer

5 Do 48 ÷ 4 using short division bus stop method

1 mark

Year 4-DIVISION Short Division (Bus stop) with Exact Answer

6 Do 363 ÷ 3 using short division bus stop method

1 mark

Year 4-DIVISION Short Division (Bus stop) with Exact Answer

7 Do 196 ÷ 8 using short division bus stop method

1 mark

Year 4-DIVISION Short Division (Bus stop) with Exact Answer

8 Do 123 ÷ 3 using short division bus stop method

1 mark

Year 4-DIVISION Short Division (Bus stop) with Exact Answer

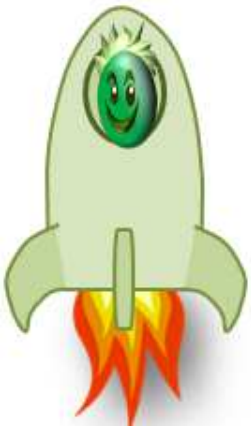
9 Do 320 ÷ 10 using short division bus stop method

1 mark

Year 4-DIVISION Short Division (Bus stop) with Exact Answer

1 Henry travelled 880 miles in his rocket

It took him 2 hours



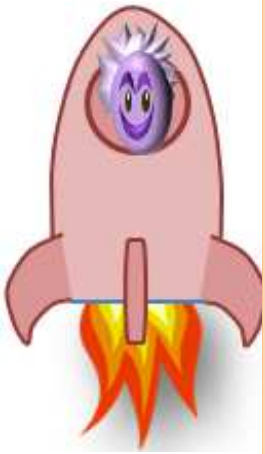
How fast was he going in miles per hour

1 mark

Year-4 DIVISION: Problem solve

2 Poppy travelled 1000 miles in her rocket.
It took her 2 hours

How fast was she going in miles per hour



1 mark

Year-4 DIVISION: Problem solve

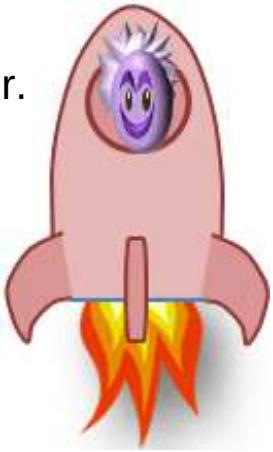
4 Poppy spent 180 minute travelling in her rocket.
How many hours is that?

hours

1 mark

Year-4 DIVISION: Problem solve

5 On her rocket trip Poppy used 300 litres of fuel.
Her trip took 3hours.
How much fuel did she use every hour.



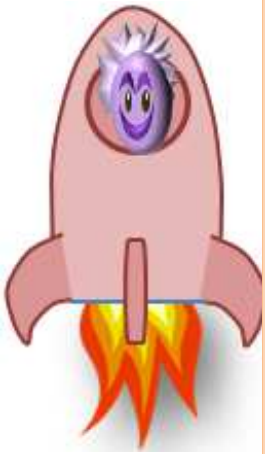
litres

1 mark

Year-4 DIVISION: Problem solve

6 Poppy travelled 2500 miles in her rocket.
It took her 5 hours

How fast was she going in miles per hour



1 mark

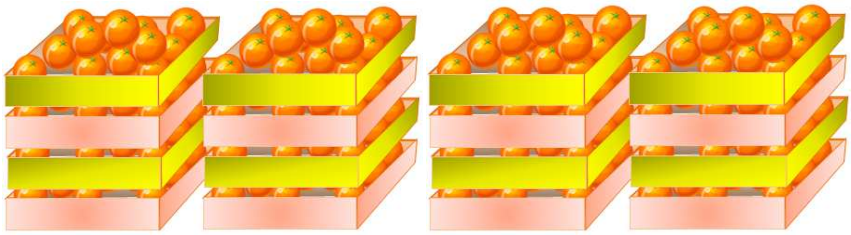
Year-4 DIVISION: Problem solve

7

Altogether there are 192 oranges

There are 4 trays in a stack

There are four stacks



How many oranges are there in each tray.

1 mark

Year-4 DIVISION: Problem solve