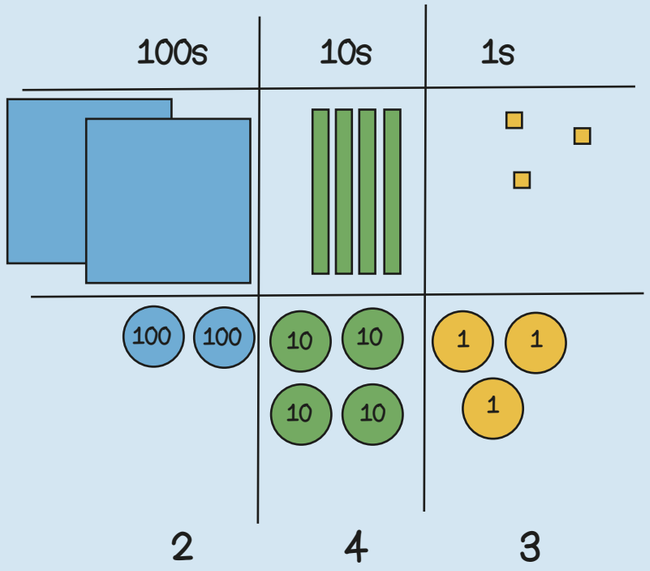


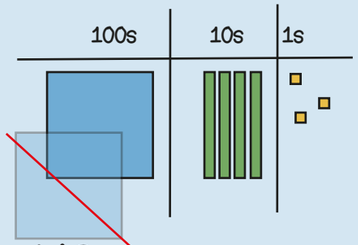
two hundred and forty-three
2 hundreds, 4 tens and 3 ones

In order from smallest to largest

261, 406, 540

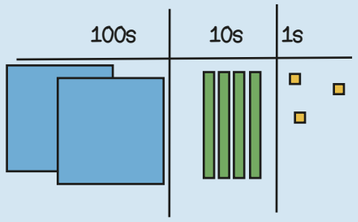
206, 260, 270, 274

Stop and look.
What do you notice?



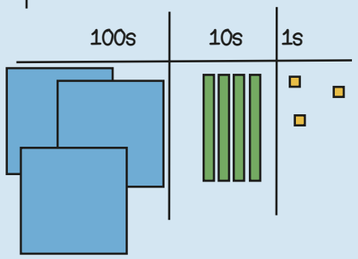
143

100 less



243

100 more



343

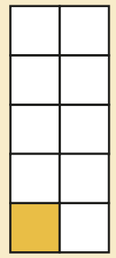
10 less

10 more

243

10 less than 243 is 233

10 more than 243 is 253

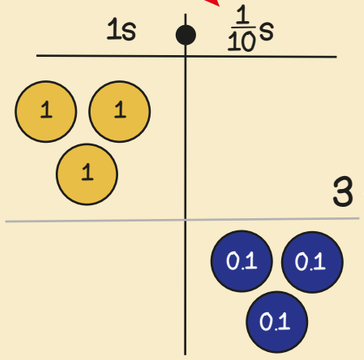


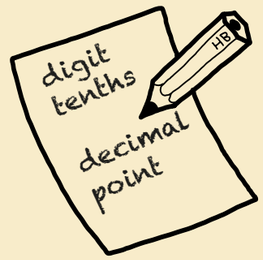
one tenth
one out of ten equal parts
one divided by ten

$\frac{1}{10}$

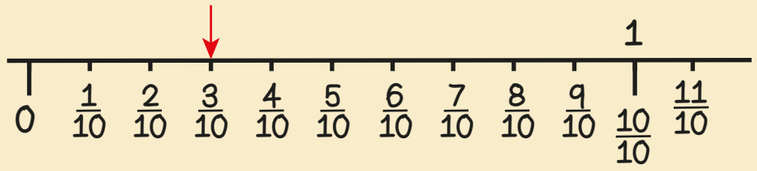
0.1

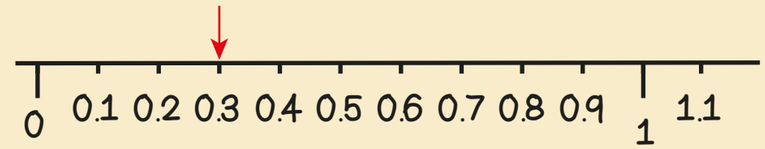
ten times smaller





$3 \div 10 = 0.3$

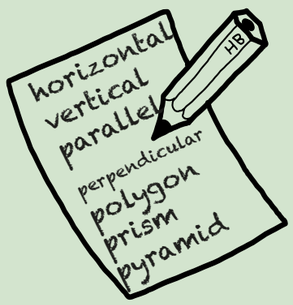




Year 3 Term 1

horizontal

vertical



parallel

perpendicular

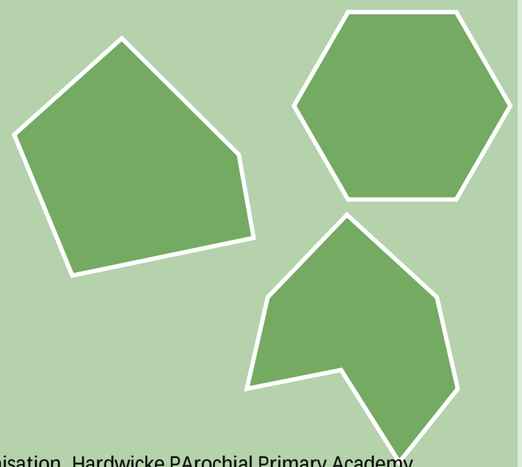
parallel

perpendicular

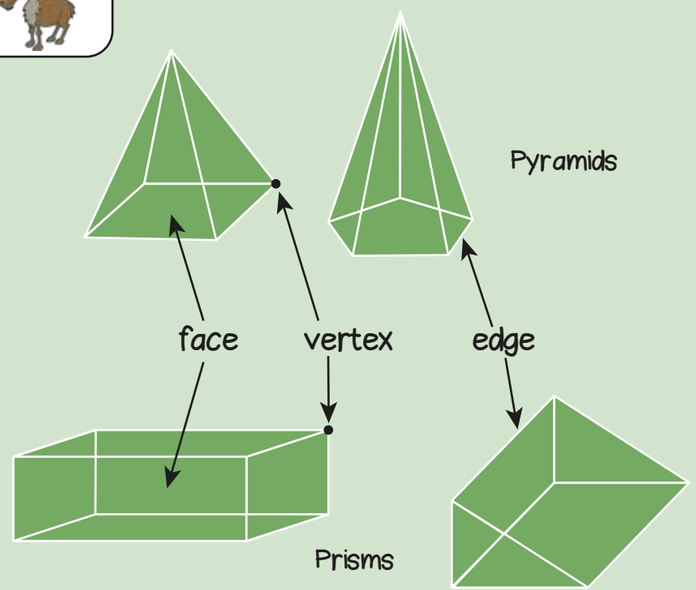
parallel

perpendicular

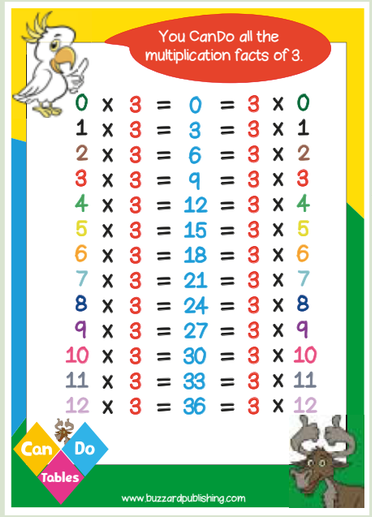
Polygons are shapes
with all straight sides



Pyramids



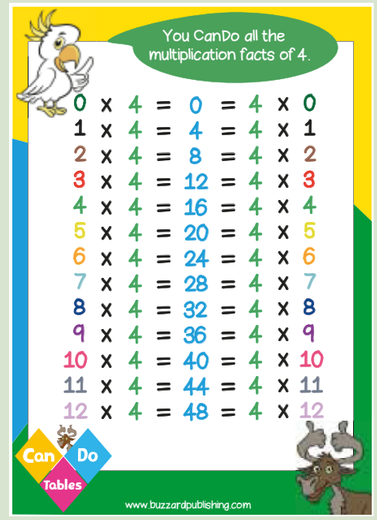
Prisms



If I know... then I also know...

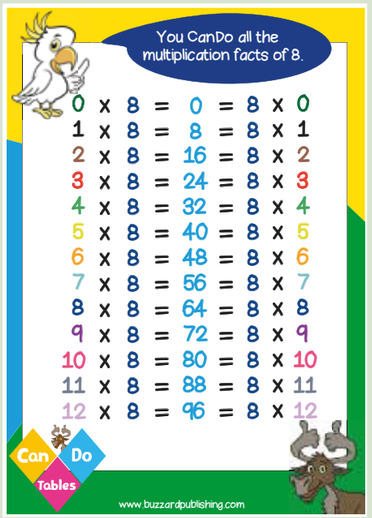
The digit sum of multiples of 3 is 3, 6 or 9

An odd number multiplied by 3 gives an odd product.



All multiples of 4 are even numbers.

There is a repeating pattern in the ones column: 0, 4, 8, 2, 6

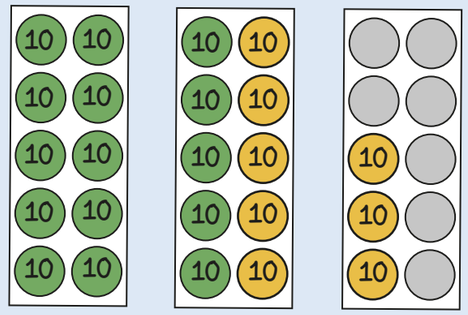


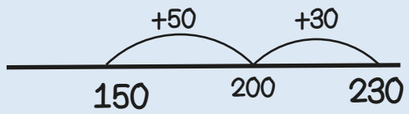
All multiples of 8 are even numbers.

All multiples of 8 are also multiples of 2 and 4

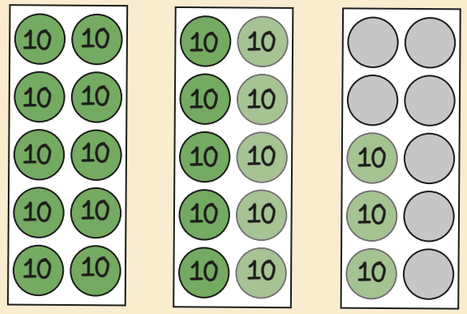
Year 3 Term 2

150 + 80
Bridging boundaries

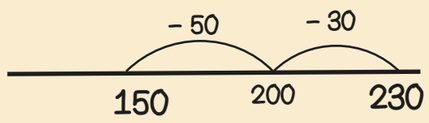




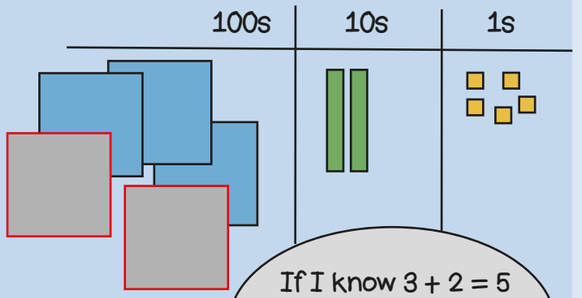
230 – 80
Bridging boundaries by counting back in efficient steps



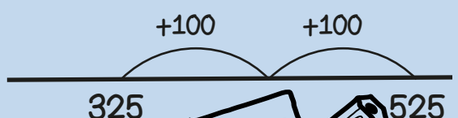
230 – 30 – 50 = 150

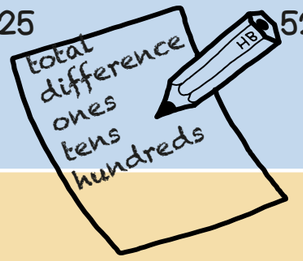


325 + 200
Add multiples of ten and a hundred

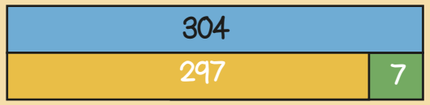


If I know 3 + 2 = 5
then I know
3 hundreds + 2 hundreds
= 5 hundreds

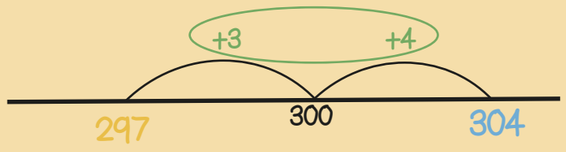




304 – 297
Find the difference between two numbers

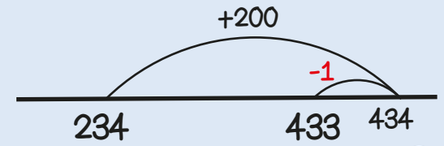


304 is 7 more than 297
297 is 7 less than 304
so the difference between them is 7



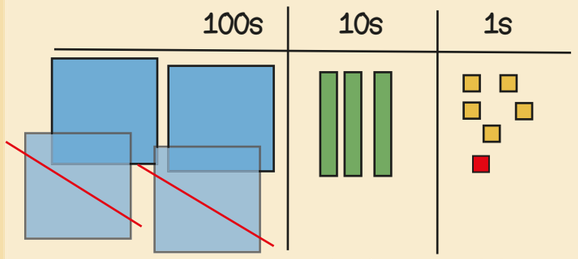
234 + 199
Round then adjust

Add 200 then subtract 1

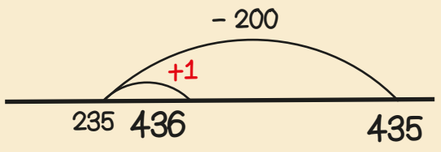


Stop and Look!
What do you notice?
What's the most efficient way?

435 – 199
Round then adjust



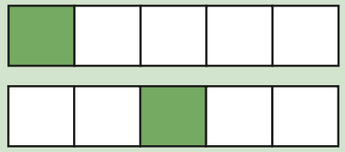
Take away 200 then add 1



Year 3 Term 3

Unit fractions have a numerator of 1

$\frac{1}{5}$



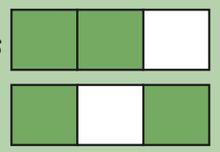
If the denominator is 5 there are 5 equal parts.

$\frac{1}{8}$

If the denominator is 8 there are 8 equal parts.

Non-unit fractions have a numerator greater than 1

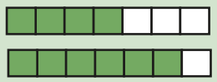
$\frac{2}{3}$ is 2 one thirds



The numerator is 2 so two out of 3 equal parts are shaded.

$\frac{4}{7}$

$\frac{4}{7} < \frac{6}{7}$

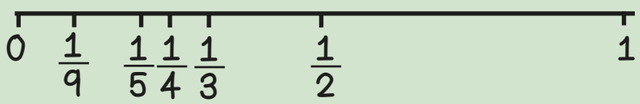


When the denominators are the same, the larger the numerator, the larger the fraction.

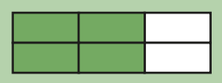
denominator
numerator
unit fraction
non-unit fraction

$\frac{2}{7} < \frac{2}{5}$

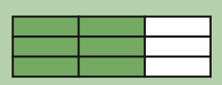
When numerators are the same, the larger the denominator the smaller the fraction.



$\frac{2}{3} = \frac{4}{6} = \frac{6}{9}$

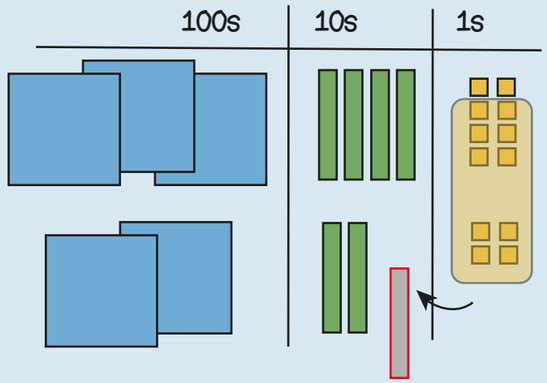


$\frac{4}{6}$ If there are 2 times as many equal parts, then there are 2 times as many shaded parts



$\frac{6}{9}$ If there are 3 times as many equal parts, then there are 3 times as many shaded parts

348 + 224
Regrouping the ones

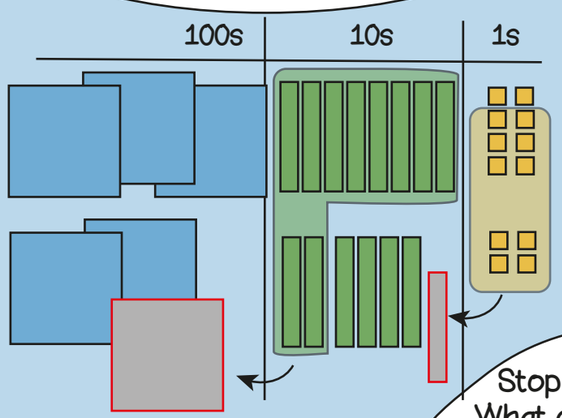


$$\begin{array}{r} 348 \\ +\ 224 \\ \hline 572 \\ \hline \end{array}$$

1

Regroup the 12 ones into 1 ten and 2 ones

388 + 264
Regroup in multiple columns



$$\begin{array}{r} 388 \\ +\ 264 \\ \hline 652 \\ \hline \end{array}$$

1 1

Stop and Look! What do you notice? Where will we regroup or exchange?

regroup
exchange
ones
tens
hundreds

76 + 388
Different numbers of digits

$$\begin{array}{r} 388 \\ +\ 76 \\ \hline 464 \\ \hline \end{array}$$

1 1

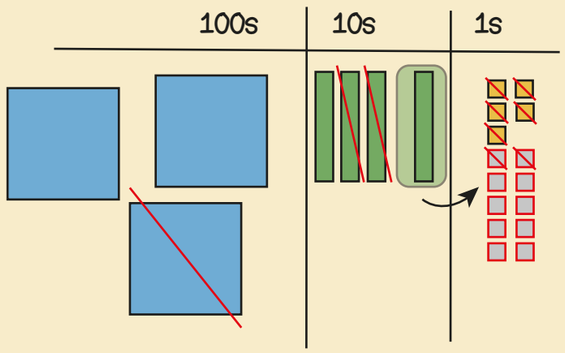
Line up the ones with the ones, the tens with the tens.

388 + 199
348 + 140
348 + 51

In my head?
With jottings?
Formal written method?

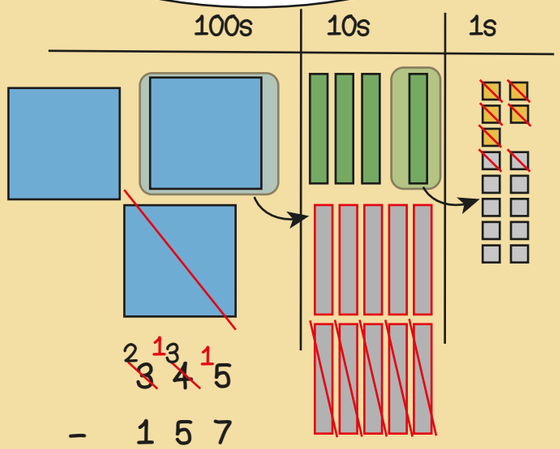
348 – 199
348 – 140
348 – 23
308 – 297

345 – 127
Exchanging tens



$$\begin{array}{r} 3\,^{3}4\,^{1}5 \\ -\ 127 \\ \hline 218 \\ \hline \end{array}$$

345 – 157
Exchanging in multiple columns

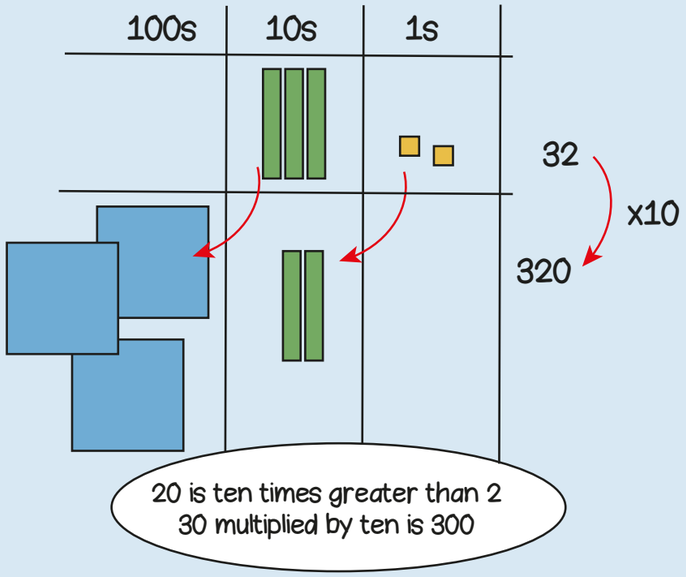


$$\begin{array}{r} 2\,^{1}3\,^{1}5 \\ -\ 157 \\ \hline 188 \\ \hline \end{array}$$

345 – 67
Different numbers of digits

$$\begin{array}{r} 2\,^{1}3\,^{1}\cancel{4}\,^{1}5 \\ -\ 67 \\ \hline 278 \\ \hline \end{array}$$

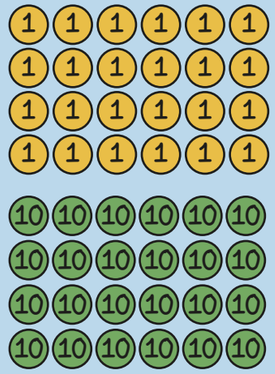
Line up the ones with the ones, the tens with the tens.



60 x 4 = ?
If I know 6 x 4 = 24
then I know 60 x 4 = 240
because it is ten times greater

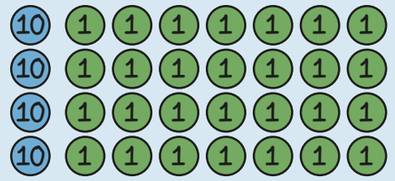
6 x 4 = 24
60 x 4 = 240
6 x 40 = 240

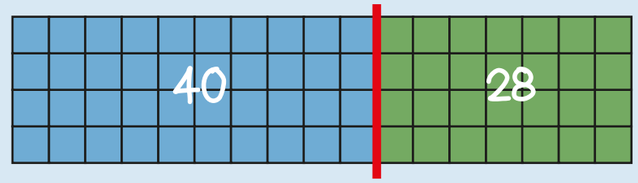
6 x 10 x 4
= 24 x 10



17 x 4

1 0 | 7

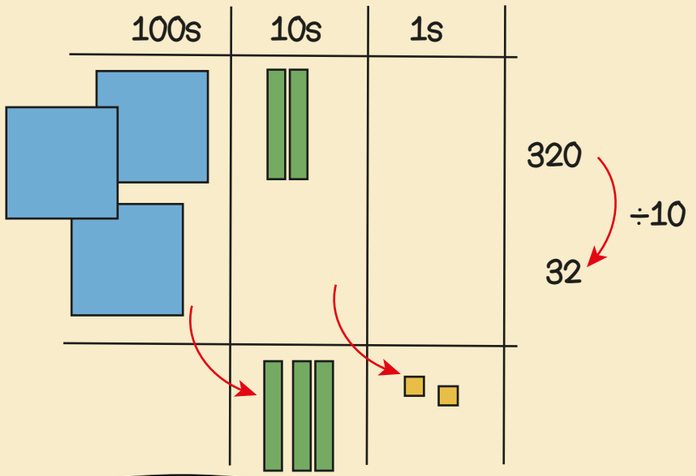


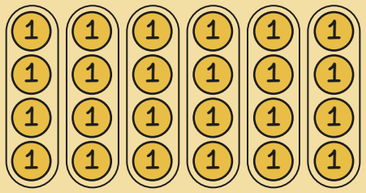


multiplier
product
partition
dividend
divisor
remainder

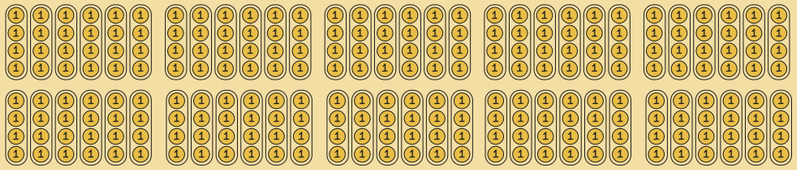
	10	7
4	40	28

17
x 4
68
2

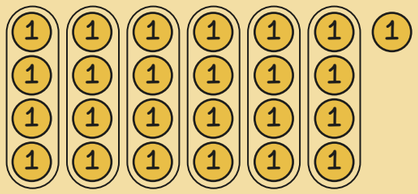


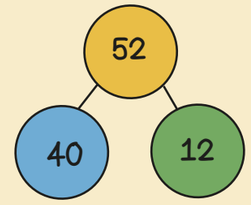


If I know 24 ÷ 4 = 6
then I know 240 ÷ 4 = 60



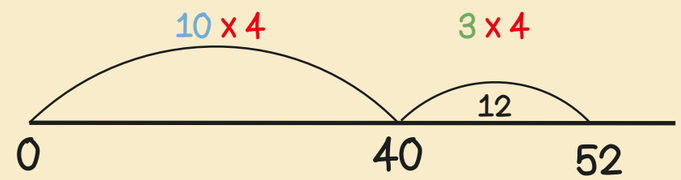
If I know 24 ÷ 4 = 6
then I know
25 ÷ 4 = 6 r1



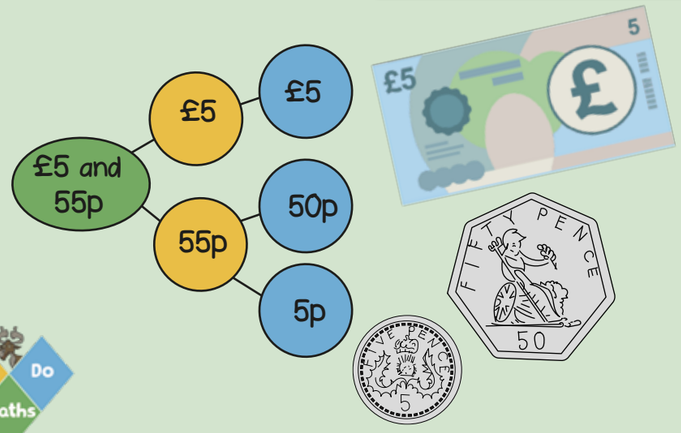


52 ÷ 4
= 40 ÷ 4 + 12 ÷ 4
= 10 + 3
= 13

I know that 40 is 10 groups of 4



Year 3 Term 4



50 + 20 + 20 + 20 + 10 = 120p
120p = £1 and 20p

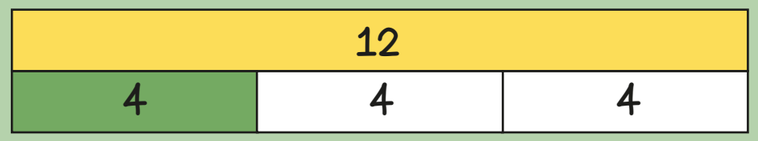
spend
pounds
pence
change

£5 subtract £2 and 65p
= £2 and 35p

500
- 265

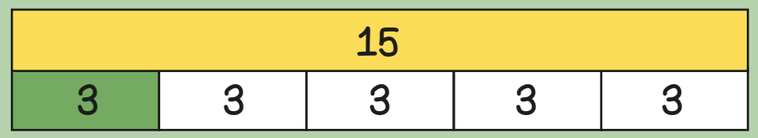
Use an efficient method!.

I have £5 and spend £2 and 65p
How much change? £2 and 35p



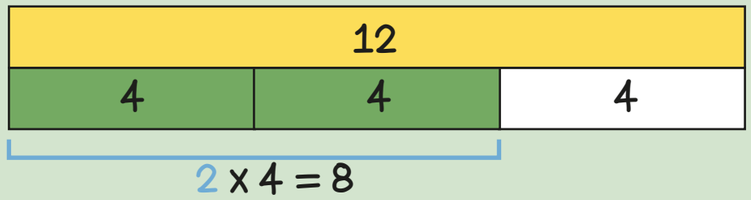
$\frac{1}{3}$ of 12 = 4

12 ÷ 3 = 4



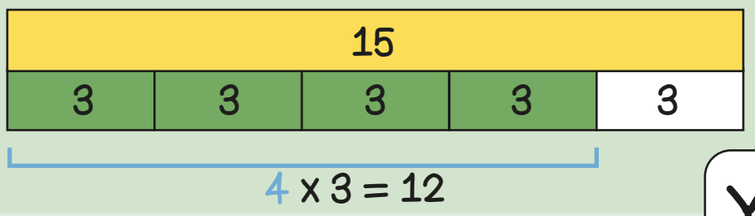
$\frac{1}{5}$ of 15 = 3

15 ÷ 5 = 3



$\frac{1}{3}$ of 12 = 4

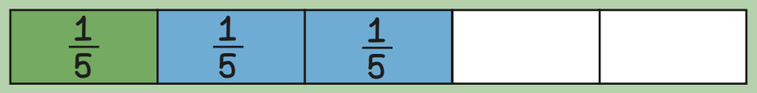
$\frac{2}{3}$ of 12 = 2 x 4 = 8



$\frac{1}{5}$ of 15 = 3

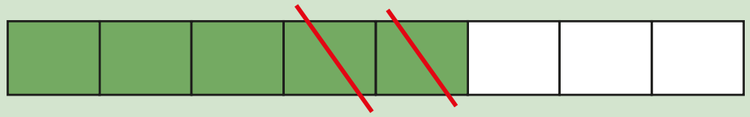
$\frac{4}{5}$ of 15 = 4 x 3 = 12

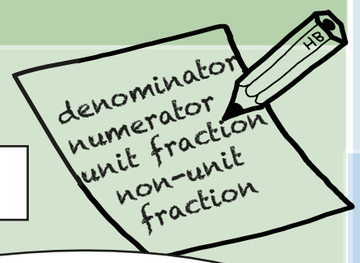
Year 3 Term 5



$\frac{1}{5} + \frac{2}{5} = \frac{3}{5}$

When adding fractions with the same denominators the denominator stays the same, just add the numerators.





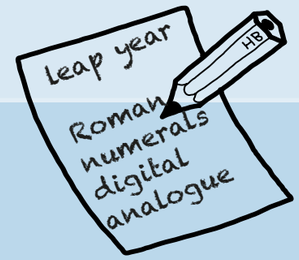
$\frac{5}{8} - \frac{2}{8} = \frac{3}{8}$

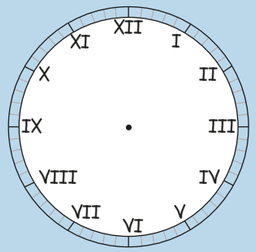
When subtracting fractions with the same denominators the denominator stays the same, just subtract the numerators.

January - 31 days
February - 28 or 29 days
March - 31 days
April - 30 days
May - 31 days
June - 30 days
July - 31 days
August - 31 days
September - 30 days
October - 31 days
November - 30 days
December - 31 days

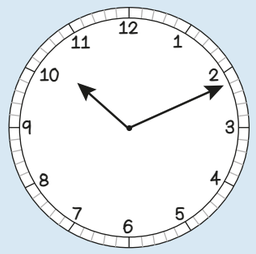
60 seconds = 1 minute
120 seconds = 2 minutes
180 seconds = 3 minutes

1 Year has 365 days but 1 leap year has 366 days.
The extra day is in February, every 4 years.

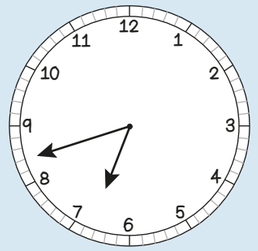




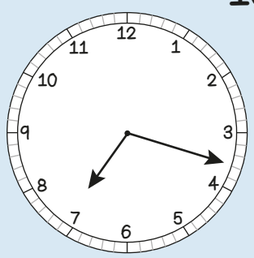
I	= 1	VII	= 7
II	= 2	VIII	= 8
III	= 3	IX	= 9
IV	= 4	X	= 10
V	= 5	XI	= 11
VI	= 6	XII	= 12



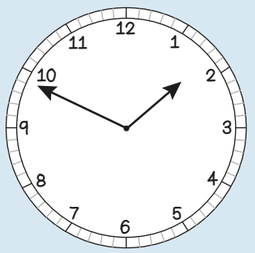
11 minutes past 10
in the morning
10:11 a.m.



18 minutes to 7
in the morning
6:42 a.m.

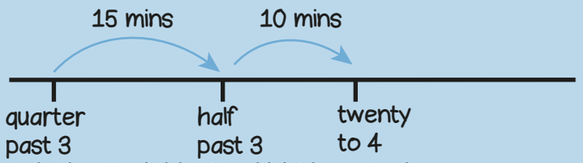


18 minutes past 7
in the evening
7:18 p.m.

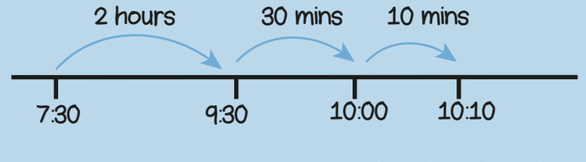


11 minutes to 2
in the afternoon
1:49 p.m.

From quarter past 3 to twenty to 4
is 25 minutes



From 7:30 a.m. to 10:10 a.m.
is 2 hours and 40 minutes



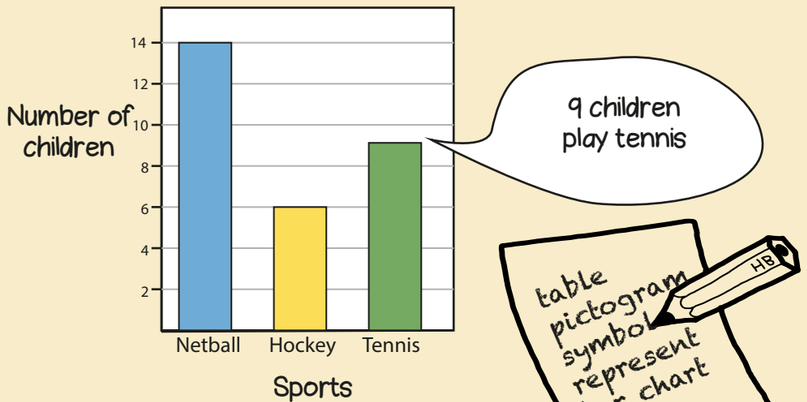
dogs	
cats	
mice	
rabbits	

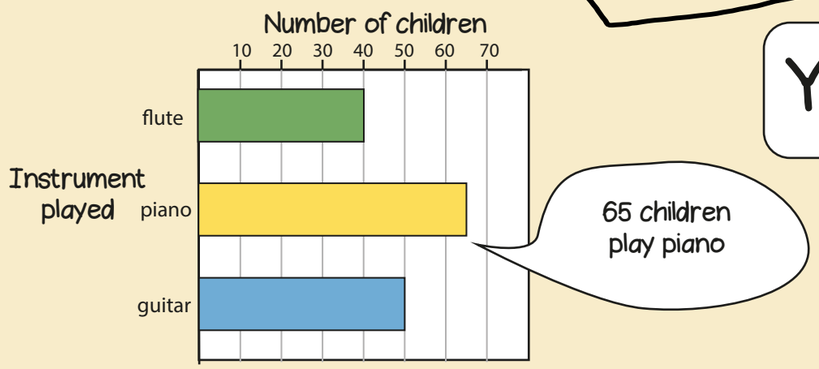
4 + 4 + 4 = 12 people own dogs

4 + 4 + 2 = 10 people own cats

= 4 people

32 people were asked in total





Sport	girls	boys
tennis	5	3
netball	4	7
football	8	6
rugby	6	8

4 girls play netball

8 − 6 = 2
2 more boys than girls play rugby

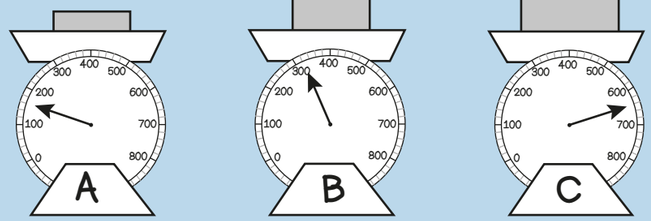
Year 3 Term 6

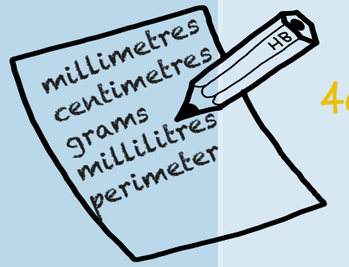
A 45mm

B 90mm

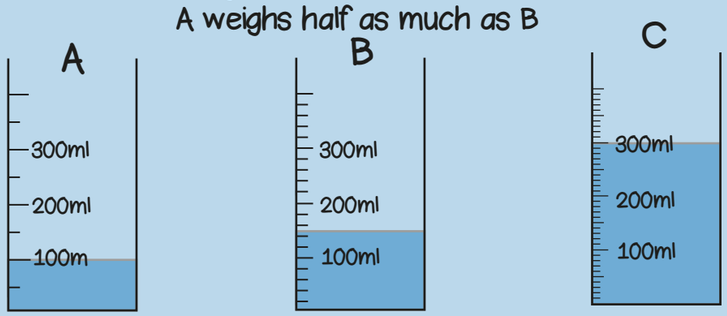
C 135mm

C is three times as long as A
A is half as long as B



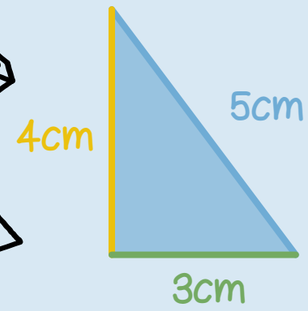


C weighs 4 times as much as A
A weighs half as much as B



C has three times as much as A
B has half as much as C

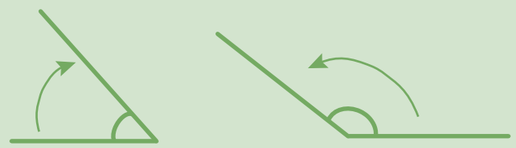
The perimeter of a shape is the total distance around the outside of the shape



Perimeter = 4 + 5 + 3
= 12cm

Perimeter = 38 + 24 + 38 + 24
= 124mm

The angle is the amount of turn

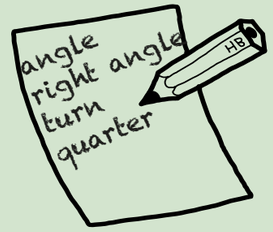


The angle is less than a right angle

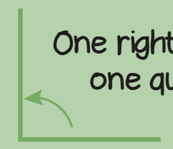
The angle is more than a right angle

This shape has 2 right angles

This shape has 4 angles



One right angle makes one quarter turn



2 right angles make one half turn

3 right angles make three quarters of a turn