

You CanDo all the multiplication facts of 3.

0	x	3	=	0	=	3	x	0
3	x	3	=	9	=	3	x	3
6	x	3	=	18	=	3	x	6
9	x	3	=	27	=	3	x	9
12	x	3	=	36	=	3	x	12
15	x	3	=	45	=	3	x	15
18	x	3	=	54	=	3	x	18
21	x	3	=	63	=	3	x	21
24	x	3	=	72	=	3	x	24
27	x	3	=	81	=	3	x	27

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

An odd number multiplied by 3 gives an odd product.

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.

You CanDo all the multiplication facts of 4.

0	x	4	=	0	=	4	x	0
4	x	4	=	16	=	4	x	4
8	x	4	=	32	=	4	x	8
12	x	4	=	48	=	4	x	12
16	x	4	=	64	=	4	x	16
20	x	4	=	80	=	4	x	20
24	x	4	=	96	=	4	x	24
28	x	4	=	112	=	4	x	28
32	x	4	=	128	=	4	x	32
36	x	4	=	144	=	4	x	36
40	x	4	=	160	=	4	x	40
44	x	4	=	176	=	4	x	44
48	x	4	=	192	=	4	x	48

All multiples of 4 are even numbers.

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



All multiples of 4 are even numbers.

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

You CanDo all the multiplication facts of 8.

0	x	8	=	0	=	8	x	0
8	x	8	=	64	=	8	x	8
16	x	8	=	128	=	8	x	16
24	x	8	=	192	=	8	x	24
32	x	8	=	256	=	8	x	32
40	x	8	=	320	=	8	x	40
48	x	8	=	384	=	8	x	48
56	x	8	=	448	=	8	x	56
64	x	8	=	512	=	8	x	64
72	x	8	=	576	=	8	x	72
80	x	8	=	640	=	8	x	80
88	x	8	=	704	=	8	x	88
96	x	8	=	768	=	8	x	96

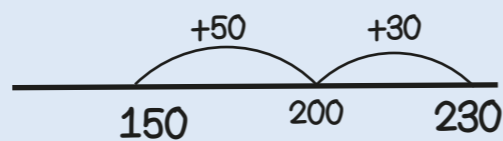
All multiples of 8 are even numbers.

All multiples of 8 are also multiples of 2 and 4

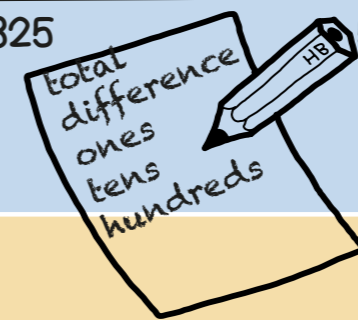
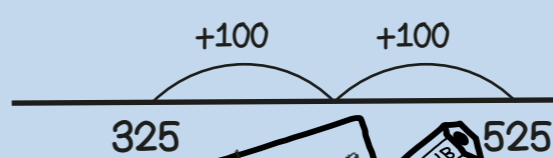
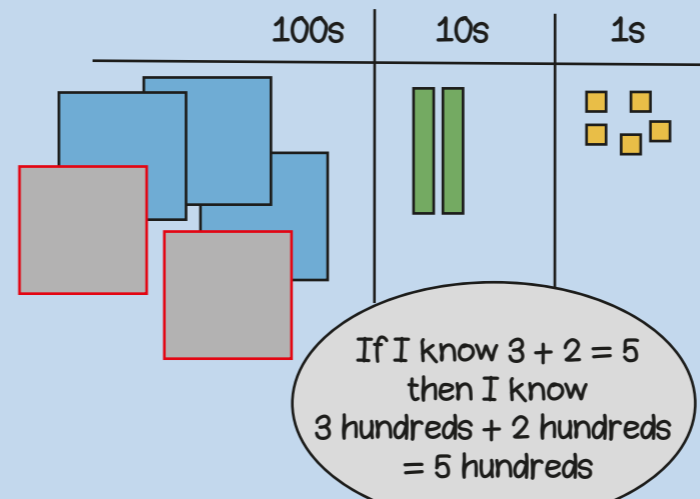
All multiples of 8 are even numbers.

All multiples of 8 are also multiples of 2 and 4

150 + 80
Bridging boundaries

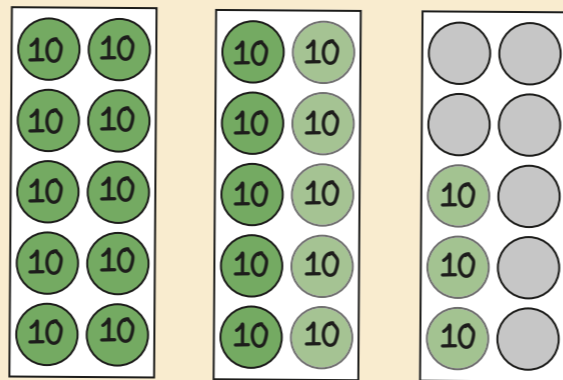


325 + 200
Add multiples of ten and a hundred

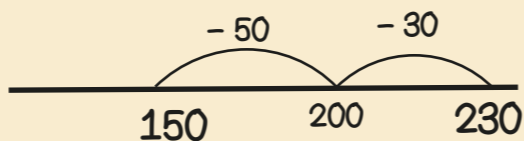


Year 3 Term 2

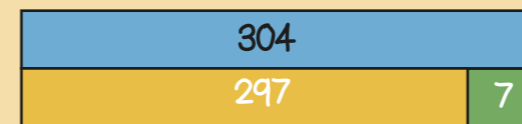
230 - 80
Bridging boundaries by counting back in efficient steps



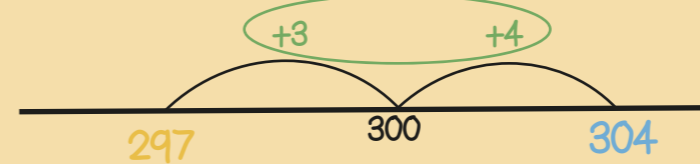
230 - 30 - 50 = 150



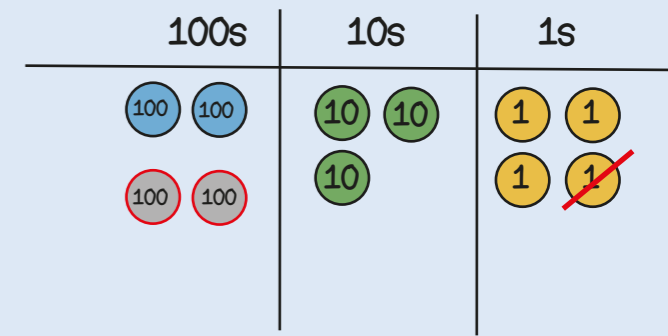
304 - 297
Find the difference between two numbers



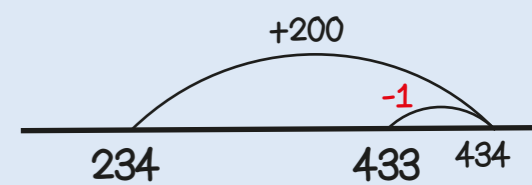
304 is 7 more than 297
297 is 7 less than 304
so the difference between them is 7



234 + 199
Round then adjust

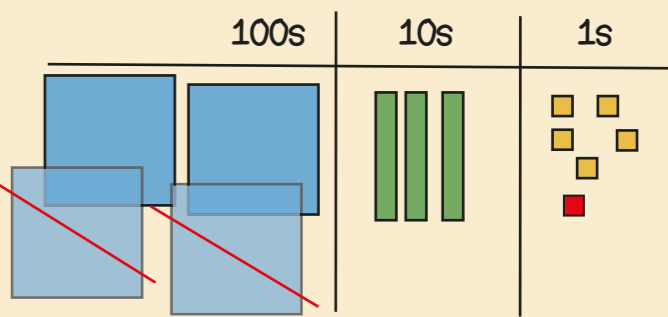


Add 200 then subtract 1

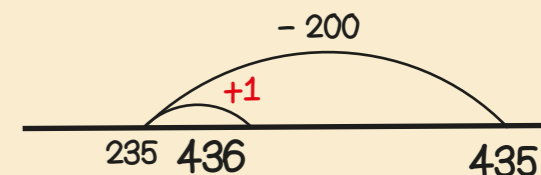


Stop and Look!
What do you notice?
What's the most efficient way?

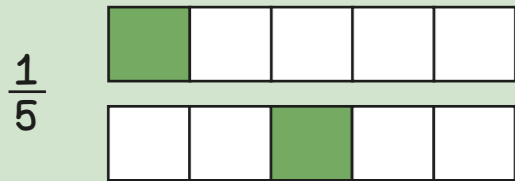
435 - 199
Round then adjust



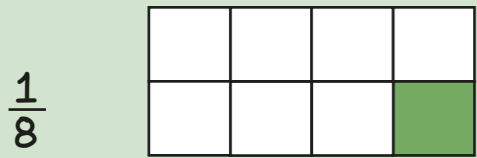
Take away 200 then add 1



Unit fractions have a numerator of 1



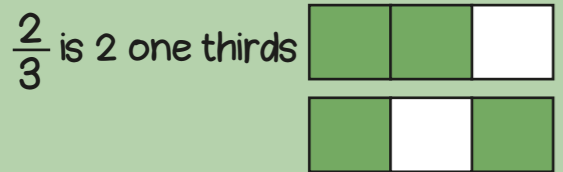
If the denominator is 5 there are 5 equal parts.



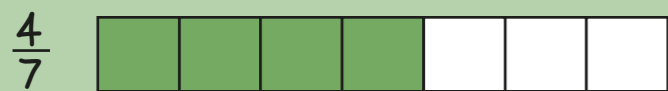
If the denominator is 8 there are 8 equal parts.



Non-unit fractions have a numerator greater than 1



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

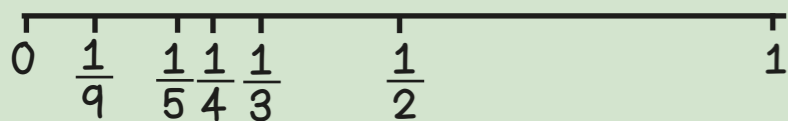


denominator
numerator
unit fraction
non-unit fraction

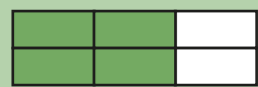
When the denominators are the same, the larger the numerator, the larger the fraction.



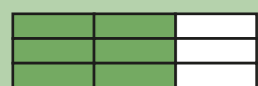
When numerators are the same, the larger the denominator the smaller the fraction.



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

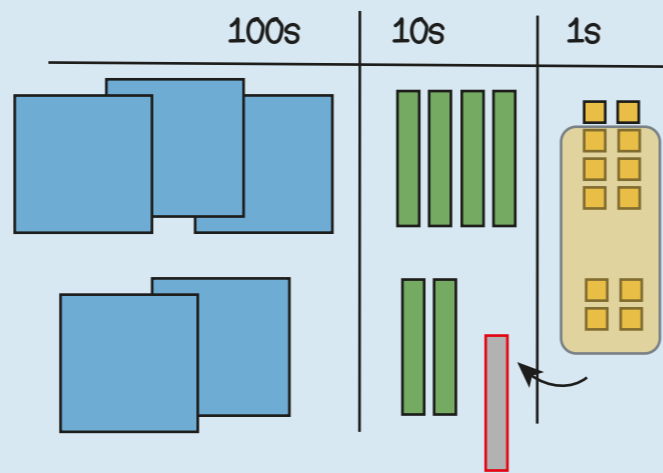


If there are 2 times as many equal parts, then there are 2 times as many shaded parts



If there are 3 times as many equal parts, then there are 3 times as many shaded parts

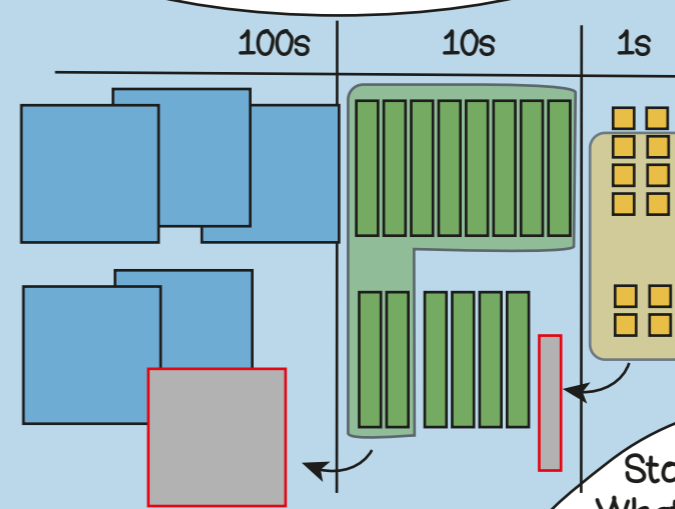
348 + 224
Regrouping the ones



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

Regroup the 12 ones into 1 ten and 2 ones

388 + 264
Regroup in multiple columns



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

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

76 + 388
Different numbers of digits

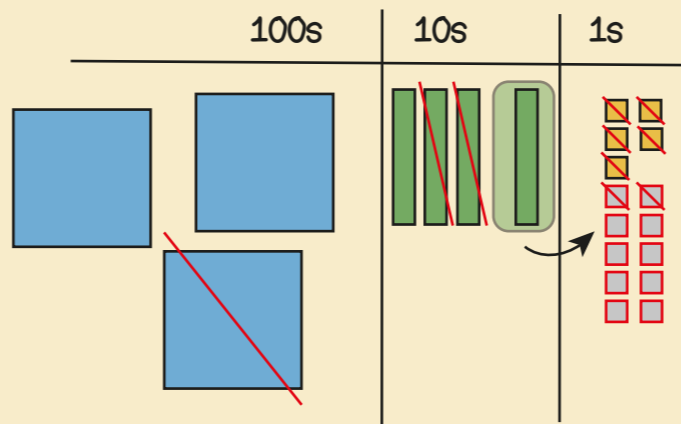
$$\begin{array}{r} 388 \\ + 76 \\ \hline 464 \end{array}$$

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

Year 3 Term 3

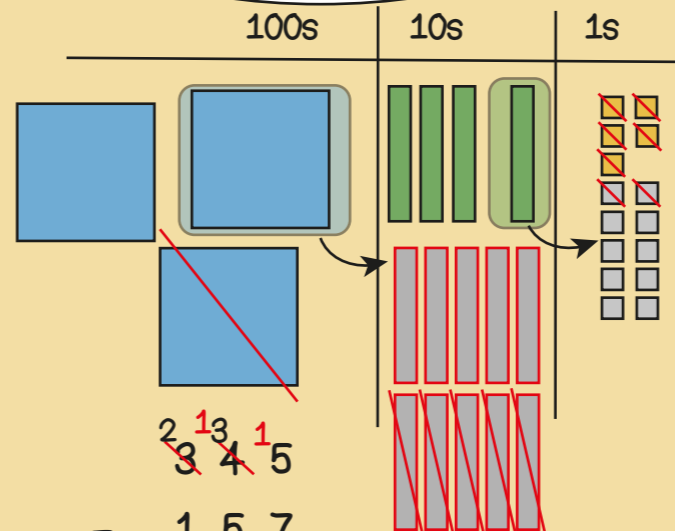


345 - 127
Exchanging tens



$$\begin{array}{r} 345 \\ - 127 \\ \hline 218 \end{array}$$

345 - 157
Exchanging in multiple columns



$$\begin{array}{r} 345 \\ - 157 \\ \hline 188 \end{array}$$

345 - 67
Different numbers of digits

$$\begin{array}{r} 345 \\ - 67 \\ \hline 278 \end{array}$$

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

In my head?
With jottings?
Formal written method?

388 + 199
348 + 140
348 + 51

348 - 199
348 - 140
348 - 23
308 - 297



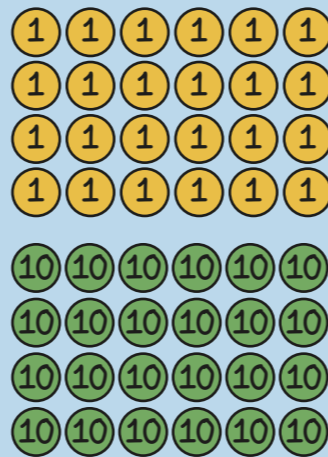
100s	10s	1s
	3 bars	2 squares
3 blue squares	3 bars	

32 → x10 → 320

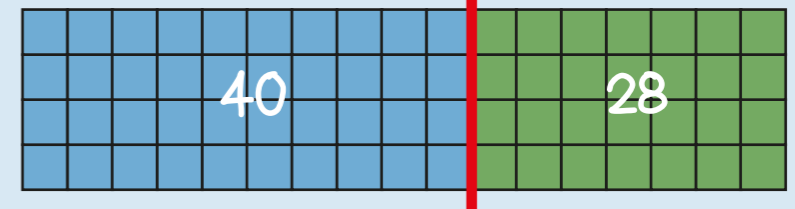
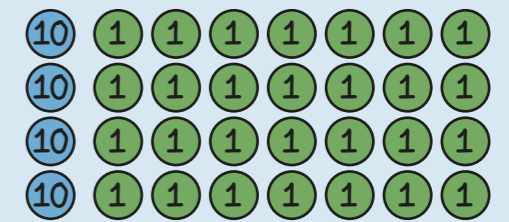
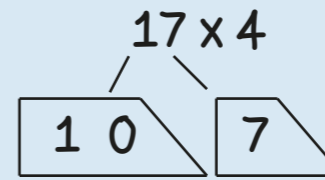
20 is ten times greater than 2
30 multiplied by ten is 300

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



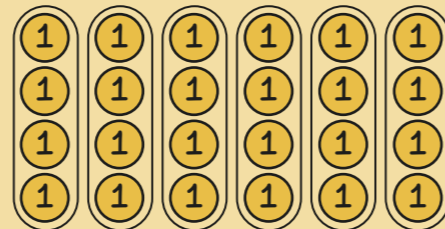
	10	7
4	40	28

$$\begin{array}{r} 17 \\ \times 4 \\ \hline 68 \\ \underline{2} \end{array}$$

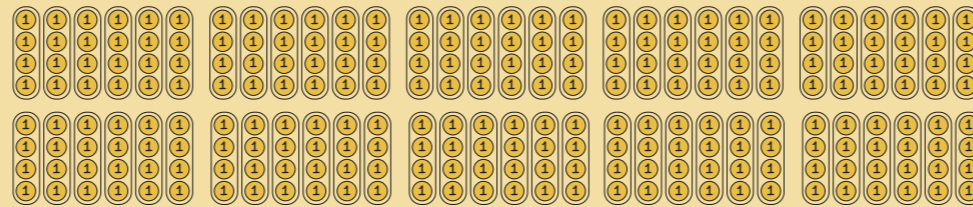
multiplier
product
partition
dividend
divisor
remainder

100s	10s	1s
3 blue squares	3 bars	2 squares
	3 bars	

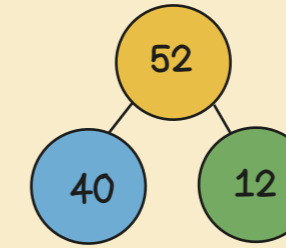
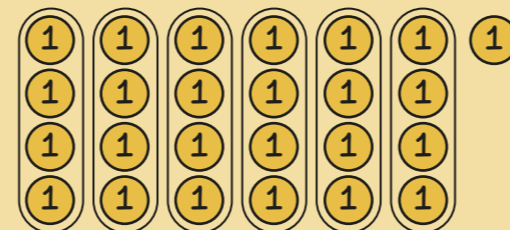
320 → ÷10 → 32



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

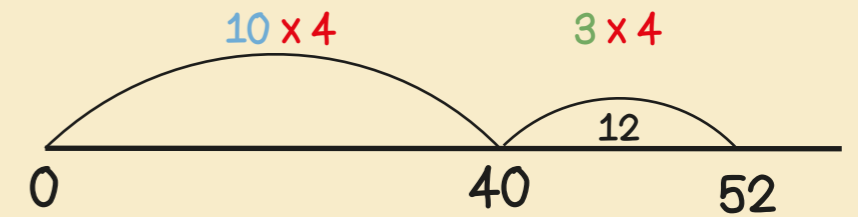


If I know 24 ÷ 4 = 6
then I know 25 ÷ 4 = 6 r1



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

I know that 40 is 10 groups of 4

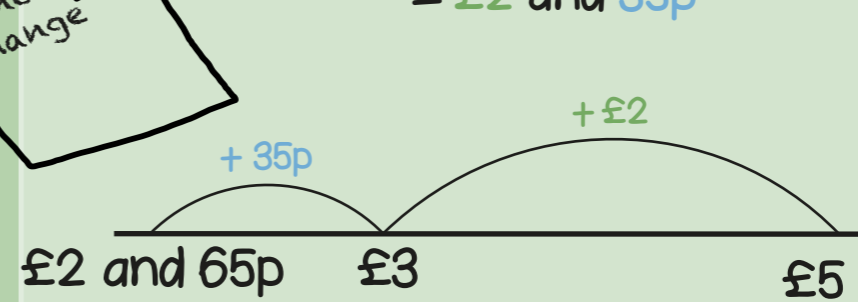


Year 3 Term 4

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

spend pounds
pence
change

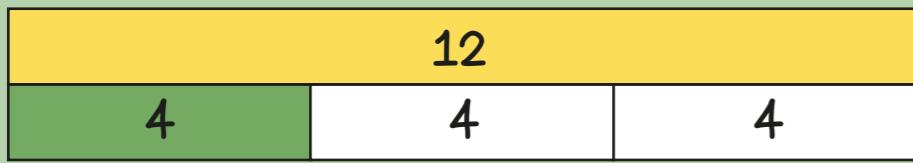
£5 subtract £2 and 65p
= £2 and 35p



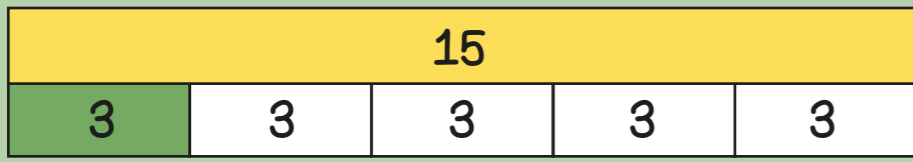
$$\begin{array}{r} 500 \\ - 265 \\ \hline \end{array}$$

Use an efficient method!

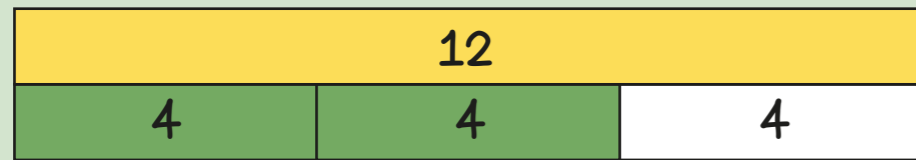
I have £5 and spend £2 and 65p
How much change? £2 and 35p



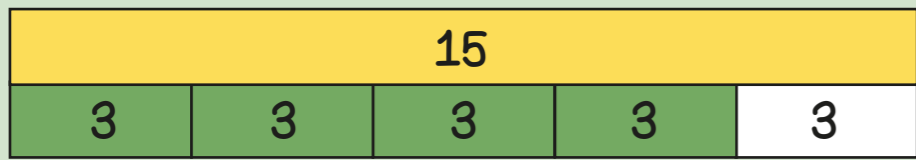
$\frac{1}{3}$ of 12 = 4
 $12 \div 3 = 4$



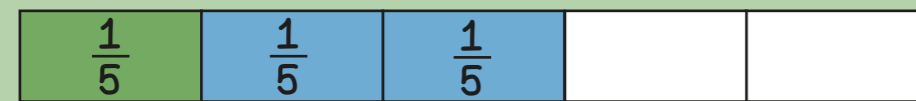
$\frac{1}{5}$ of 15 = 3
 $15 \div 5 = 3$



$\frac{1}{3}$ of 12 = 4
 $\frac{2}{3}$ of 12 = $2 \times 4 = 8$



$\frac{1}{5}$ of 15 = 3
 $\frac{4}{5}$ of 15 = $4 \times 3 = 12$



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

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.

denominator
 numerator
 unit fraction
 non-unit fraction

Year 3 Term 5



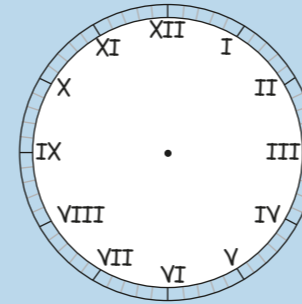
January - 31 days
 February - 28 or 29 days
 March - 31 days
 April - 30 days
 May - 31 days
 June - 30 days

July - 31 days
 August - 31 days
 September - 30 days
 October - 31 days
 November - 30 days
 December - 31 days

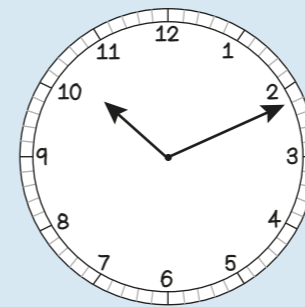
60 seconds = 1 minute
 120 seconds = 2 minutes
 180 seconds = 3 minutes

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

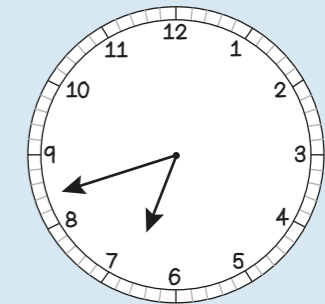
Leap year
 Roman numerals
 digital
 analogue



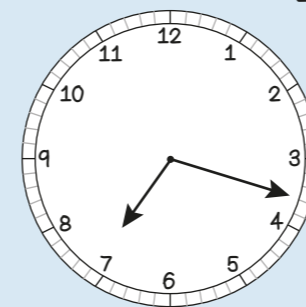
- | | |
|---------|----------|
| I = 1 | VII = 7 |
| II = 2 | VIII = 8 |
| III = 3 | IX = 9 |
| IV = 4 | X = 10 |
| V = 5 | XI = 11 |
| VI = 6 | XII = 12 |



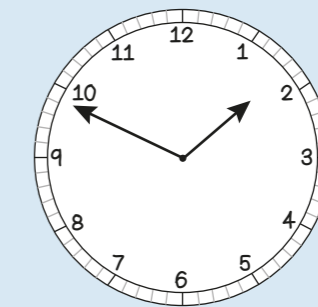
11 minutes past 10
 in the morning
 10:11 a.m.



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

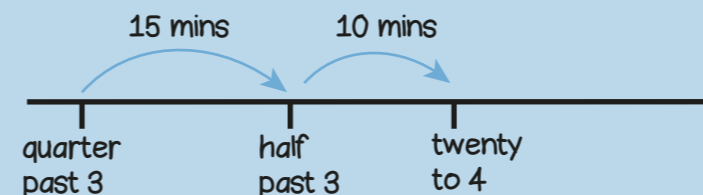


18 minutes past 7
 in the evening
 7:18 p.m.

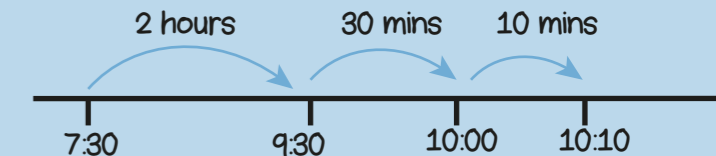


11 minutes to 2
 in the afternoon
 1:49 p.m.

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	

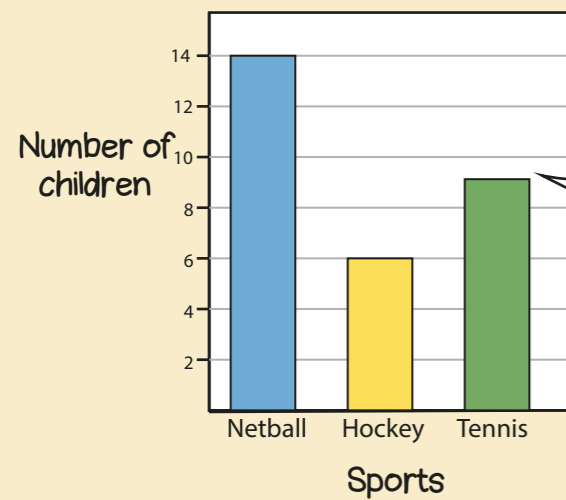
$4 + 4 + 4 = 12$ people own dogs

$4 + 4 + 2 = 10$ people own cats



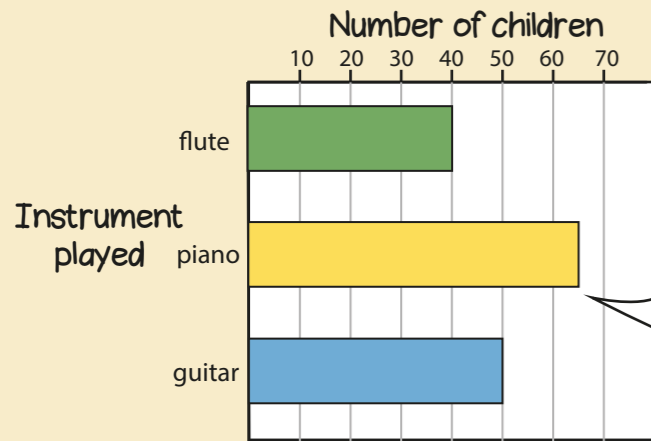
= 4 people

32 people were asked in total



9 children play tennis

table pictogram symbol represent bar chart

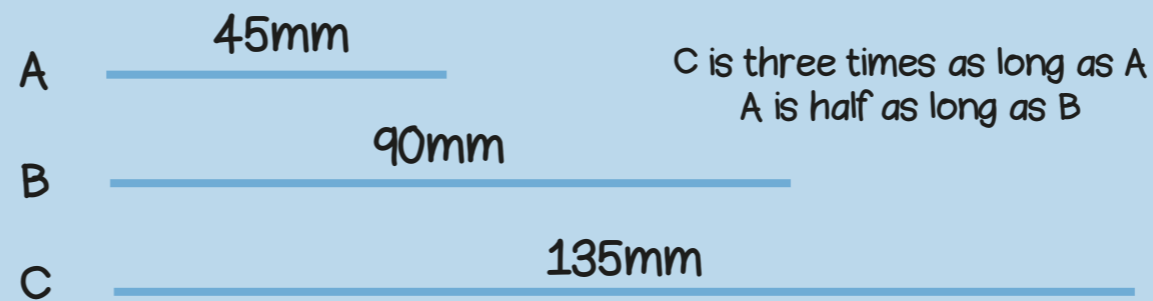


65 children play piano

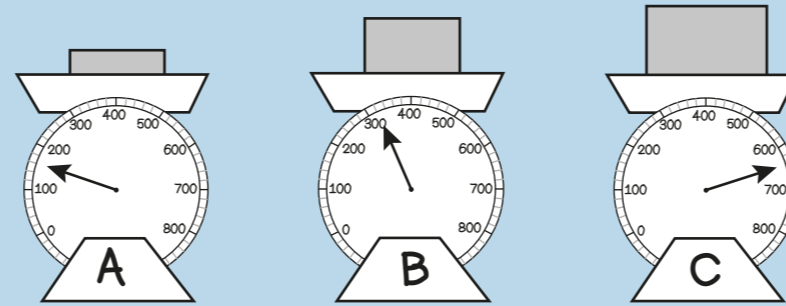
Sport	girls	boys
tennis	5	3
netball	4	7
football	8	6
rugby	6	8

4 girls play netball

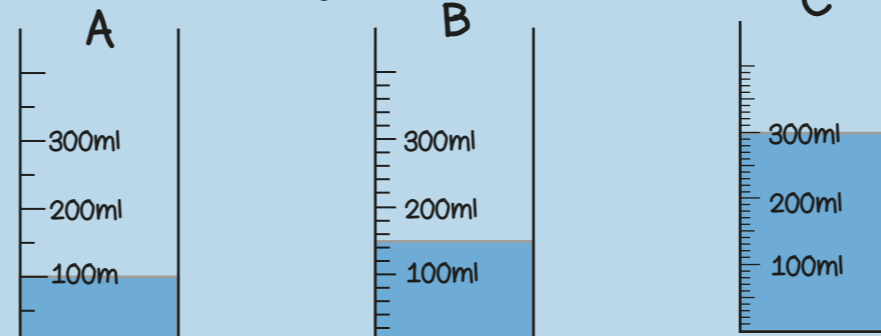
$8 - 6 = 2$
2 more boys than girls play rugby



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

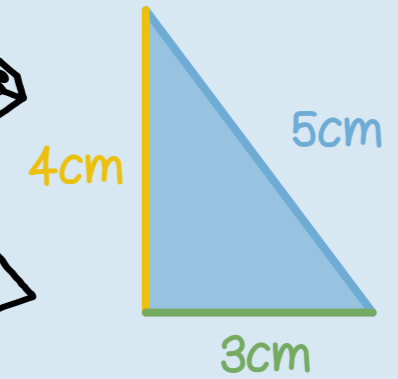


C weighs 4 times as much as A
A weighs half as much as B



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 = $4 + 5 + 3 = 12$ cm

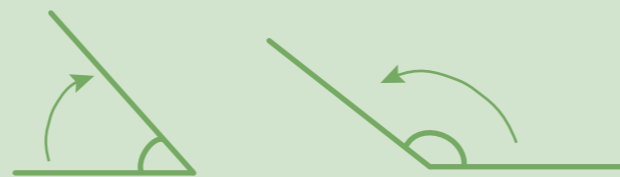


Perimeter = $38 + 24 + 38 + 24 = 124$ mm

Year 3 Term 6



The angle is the amount of turn



The angle is less than a right angle



The angle is more than a right angle



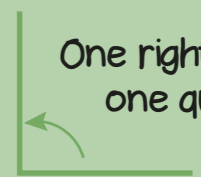
This shape has 2 right angles



This shape has 4 angles

angle right angle turn quarter

One right angle makes one quarter turn



2 right angles make one half turn



3 right angles make three quarters of a turn

