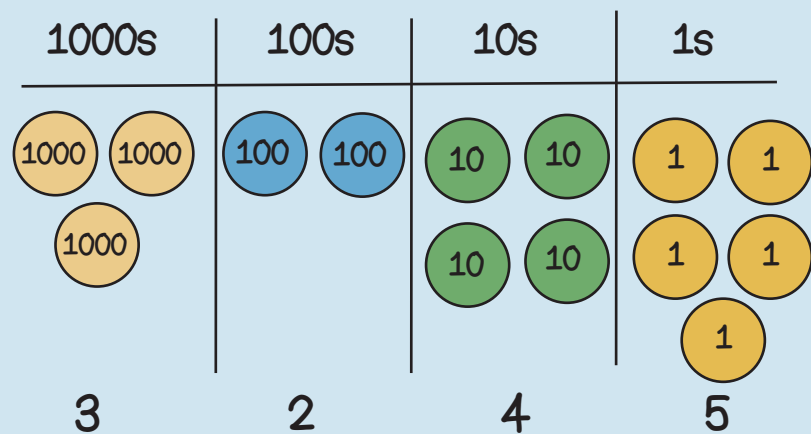




three thousand, two hundred and forty-five
3 thousands, 2 hundreds, 4 tens and 5 ones

In order from smallest to largest

2987, 5894, 6080

4261, 4406, 4540

Stop and look.
What do you notice?

thousands
digit
round
multiple
positive
negative

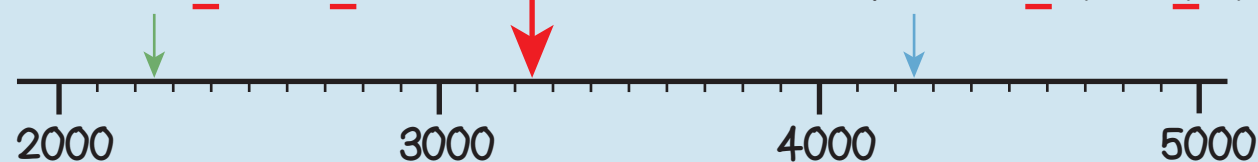
1000 less

1000 more

3245

1000 less than 3245 is 2245

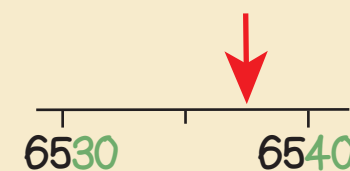
1000 more than 3245 is 4245



5 or more - round up
4 or less - round down

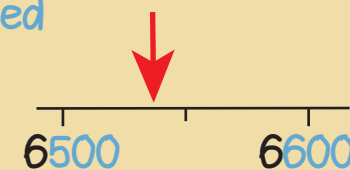
Round to the nearest ten

6538 → 6540



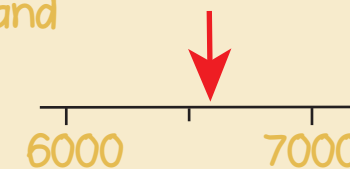
Round to the nearest hundred

6538 → 6500



Round to the nearest thousand

6538 → 7000



Year 4 Term 1



Equilateral Triangles
3 equal sides

trapezium
parallelogram
rhombus
kite
adjacent
equilateral
scalene
isosceles

Quadrilaterals are shapes with
4 straight sides

parallelogram - opposite
sides parallel

rectangles - 4 right angles

rhombus - 4 equal sides

squares

Trapezium - exactly
one pair of parallel sides

Kites - 2 pairs of equal
adjacent sides

Scalene Triangles
all sides different

You CanDo all the multiplication facts of 6.

0	x 6	= 0	= 6 x 0
1	x 6	= 6	= 6 x 1
2	x 6	= 12	= 6 x 2
3	x 6	= 18	= 6 x 3
4	x 6	= 24	= 6 x 4
5	x 6	= 30	= 6 x 5
6	x 6	= 36	= 6 x 6
7	x 6	= 42	= 6 x 7
8	x 6	= 48	= 6 x 8
9	x 6	= 54	= 6 x 9
10	x 6	= 60	= 6 x 10
11	x 6	= 66	= 6 x 11
12	x 6	= 72	= 6 x 12

Can Do Tables

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

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

All multiples of 6 are even numbers.

You CanDo all the multiplication facts of 9.

0	x 9	= 0	= 9 x 0
1	x 9	= 9	= 9 x 1
2	x 9	= 18	= 9 x 2
3	x 9	= 27	= 9 x 3
4	x 9	= 36	= 9 x 4
5	x 9	= 45	= 9 x 5
6	x 9	= 54	= 9 x 6
7	x 9	= 63	= 9 x 7
8	x 9	= 72	= 9 x 8
9	x 9	= 81	= 9 x 9
10	x 9	= 90	= 9 x 10
11	x 9	= 99	= 9 x 11
12	x 9	= 108	= 9 x 12

Can Do Tables

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The digit sum of multiples of 9 is 9

An odd number multiplied by 9 gives an odd product.

You CanDo all the multiplication facts of 7.

0	x 7	= 0	= 7 x 0
1	x 7	= 7	= 7 x 1
2	x 7	= 14	= 7 x 2
3	x 7	= 21	= 7 x 3
4	x 7	= 28	= 7 x 4
5	x 7	= 35	= 7 x 5
6	x 7	= 42	= 7 x 6
7	x 7	= 49	= 7 x 7
8	x 7	= 56	= 7 x 8
9	x 7	= 63	= 7 x 9
10	x 7	= 70	= 7 x 10
11	x 7	= 77	= 7 x 11
12	x 7	= 84	= 7 x 12

Can Do Tables

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An odd number multiplied by 7 gives an odd product.

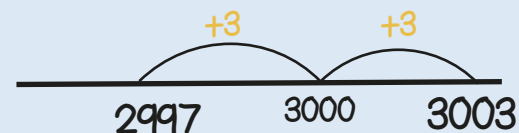
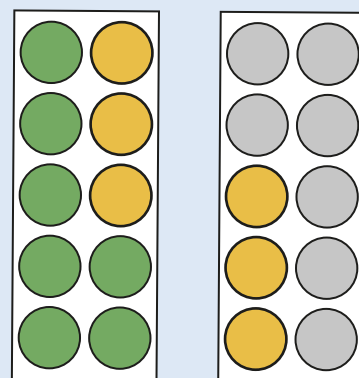
An even number multiplied by 7 gives an even product.

$64 \times 0 = 0$
The product of a number and zero is zero.

$64 \times 1 = 64$
The product of a number and 1 is the number itself.

$64 \div 1 = 64$
The quotient when dividing a number by 1 is the number itself.

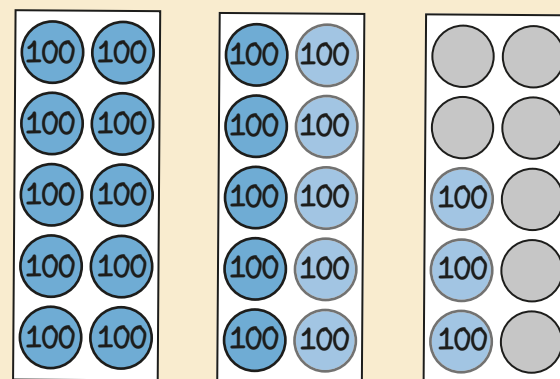
$2997 + 6$
Bridging boundaries



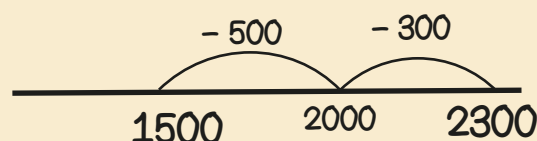
If I know $7 + 6 = 13$ then...

Year 4 Term 2

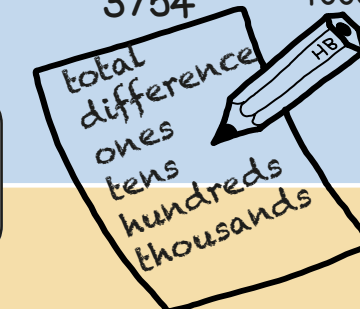
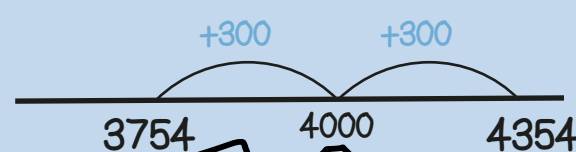
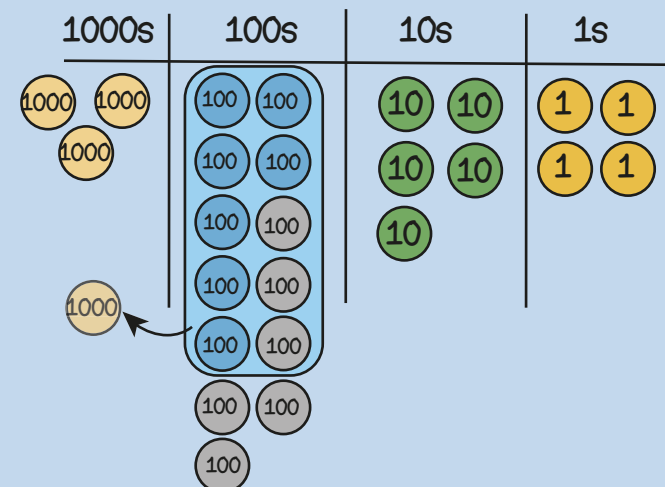
$2300 - 800$
Bridging boundaries by counting back in efficient steps



$$2300 - 300 - 500 = 1500$$



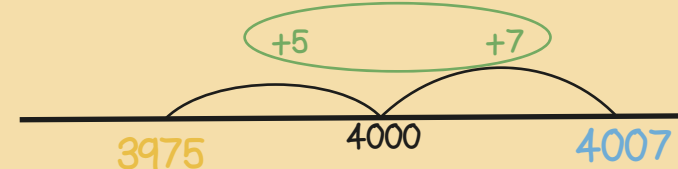
$3754 + 600$
Add multiples of ten and a hundred



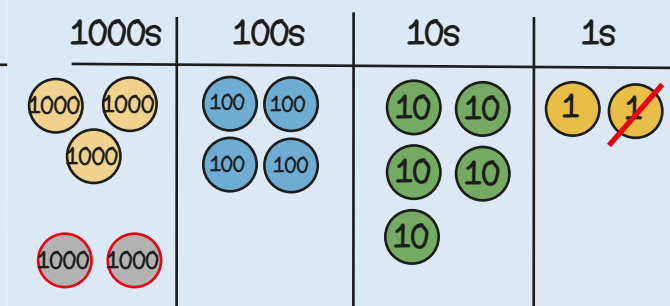
$3995 - 4007$
Find the difference between two numbers



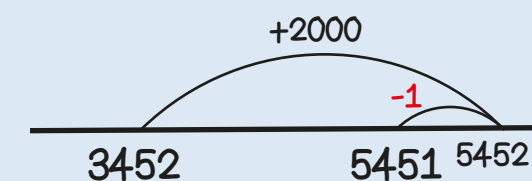
Count on 5 from 3995 to 4000, then 7 more so the difference between them is $5 + 7 = 12$



$3452 + 1999$
Round then adjust

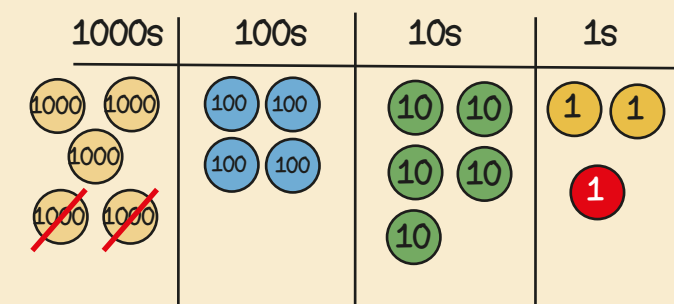


Add 2000 then subtract 1

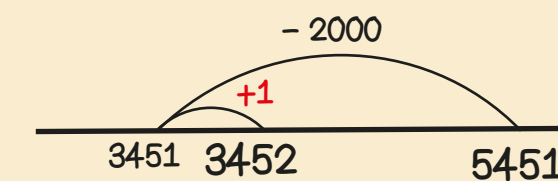


Stop and Look!
What do you notice?
What's the most efficient way?

$5451 - 1999$
Round then adjust



Take away 2000 then add 1



You CanDo all the multiplication facts of 11.

0	x 11	= 0	= 11 x 0
1	x 11	= 11	= 11 x 1
2	x 11	= 22	= 11 x 2
3	x 11	= 33	= 11 x 3
4	x 11	= 44	= 11 x 4
5	x 11	= 55	= 11 x 5
6	x 11	= 66	= 11 x 6
7	x 11	= 77	= 11 x 7
8	x 11	= 88	= 11 x 8
9	x 11	= 99	= 11 x 9
10	x 11	= 110	= 11 x 10
11	x 11	= 121	= 11 x 11
12	x 11	= 132	= 11 x 12

Can Do Tables

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

If the digits are the same then a 2-digit number is divisible by 11

An odd number multiplied by 11 gives an odd product.

You CanDo all the multiplication facts of 12.

0	x 12	= 0	= 12 x 0
1	x 12	= 12	= 12 x 1
2	x 12	= 24	= 12 x 2
3	x 12	= 36	= 12 x 3
4	x 12	= 48	= 12 x 4
5	x 12	= 60	= 12 x 5
6	x 12	= 72	= 12 x 6
7	x 12	= 84	= 12 x 7
8	x 12	= 96	= 12 x 8
9	x 12	= 108	= 12 x 9
10	x 12	= 120	= 12 x 10
11	x 12	= 132	= 12 x 11
12	x 12	= 144	= 12 x 12

Can Do Tables

www.buzzardpublishing.com



A number is divisible by 12 if it is divisible by 3 and 4

All multiples of 12 are even numbers.



$$12 \times 6 = 72$$

$$72 = 12 \times 6$$

$$72 \div 12 = 6$$

$$6 = 72 \div 12$$

$$6 \times 12 = 72$$

$$72 = 6 \times 12$$

$$72 \div 6 = 12$$

$$12 = 72 \div 6$$

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

$$5 \times 2 \times 6 = 60 = 6 \times 2 \times 5$$

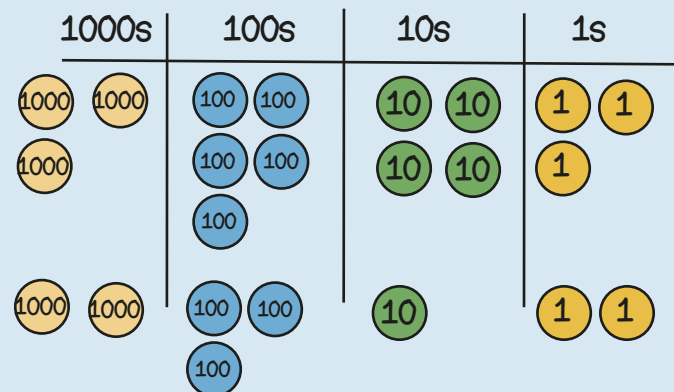
$$5 \times 2 \times 6 = 10 \times 6 = 60$$

$$5 \times 2 \times 6 = 5 \times 12 = 60$$

$$5 \times 2 \times 6 = 2 \times 30 = 60$$

$$3543 + 2312$$

No regrouping

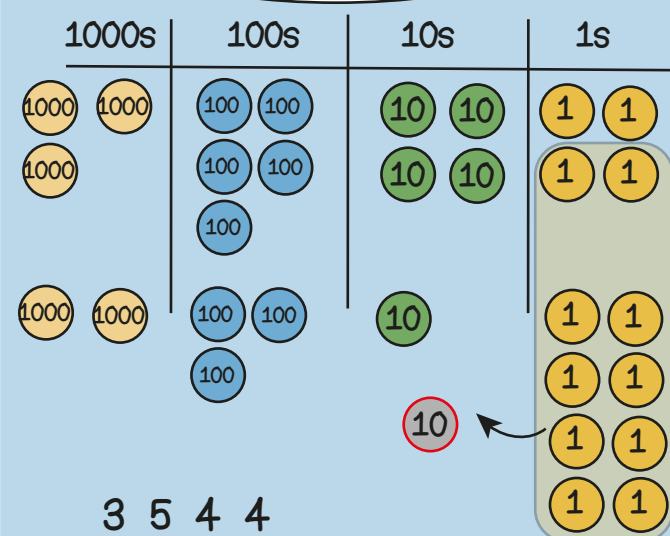


$$\begin{array}{r} 3543 \\ + 2312 \\ \hline 5855 \end{array}$$

$$\begin{array}{l} 3 + 2 = 5 \\ 4 + 1 = 5 \\ 5 + 3 = 8 \\ 3 + 2 = 5 \end{array}$$

$$3544 + 2318$$

Regrouping the ones



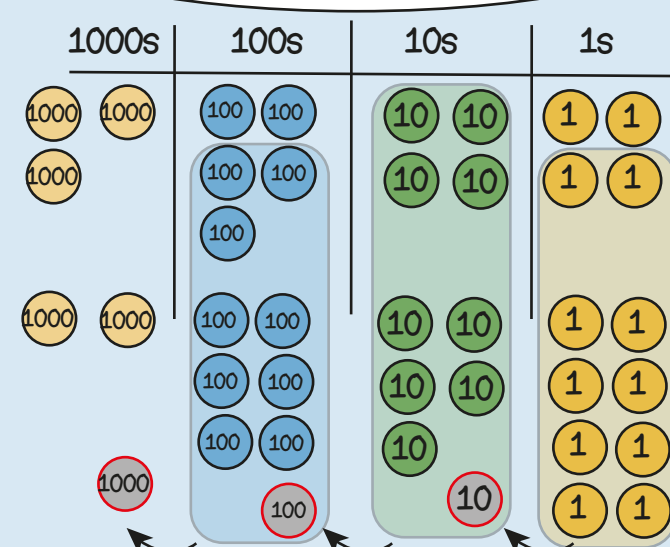
$$\begin{array}{r} 3544 \\ + 2318 \\ \hline 5862 \end{array}$$

Regroup the 12 ones into 1 ten and 2 ones



$$3544 + 2658$$

Regrouping in multiple columns



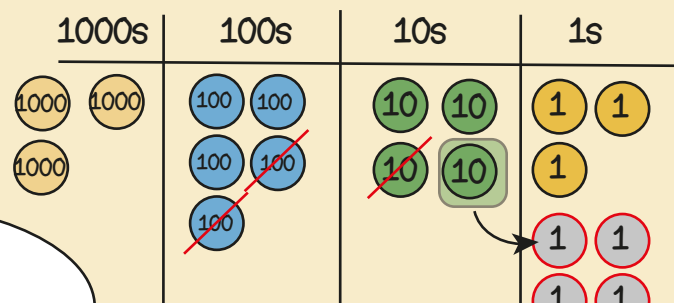
$$\begin{array}{r} 3544 \\ + 2658 \\ \hline 6202 \end{array}$$

If the column sum is equal to ten or more, we must regroup.

Year 4 Term 3

$$3543 - 1216$$

Exchanging tens



$$\begin{array}{r} 3543 \\ - 1216 \\ \hline 2327 \end{array}$$

If the ones digit in the minuend is less than the ones digit in the subtrahend, I need to exchange 1 ten for 10 ones.

$$3343 - 1756$$

Exchanging in multiple columns



$$\begin{array}{r} 3343 \\ - 1756 \\ \hline 1587 \end{array}$$

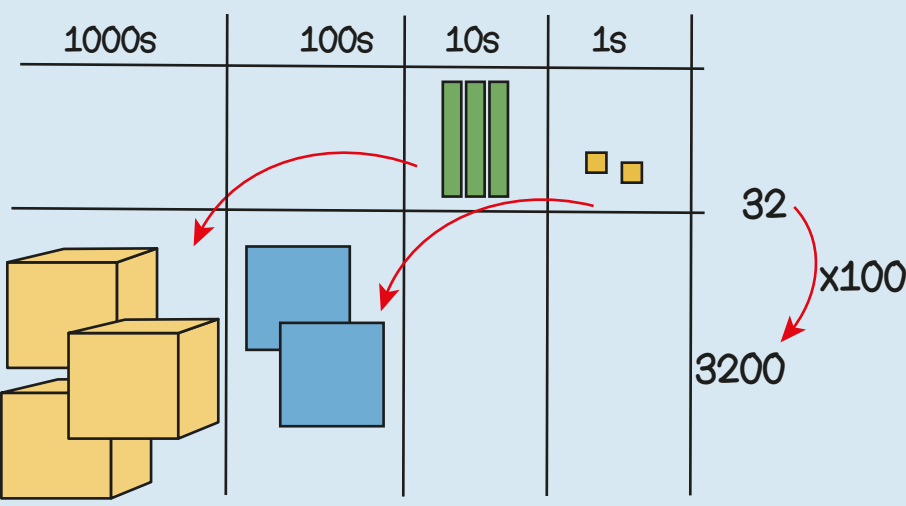
Stop and Look! What do you notice? Where will we regroup or exchange?

$$3543 - 835$$

Different numbers of digits

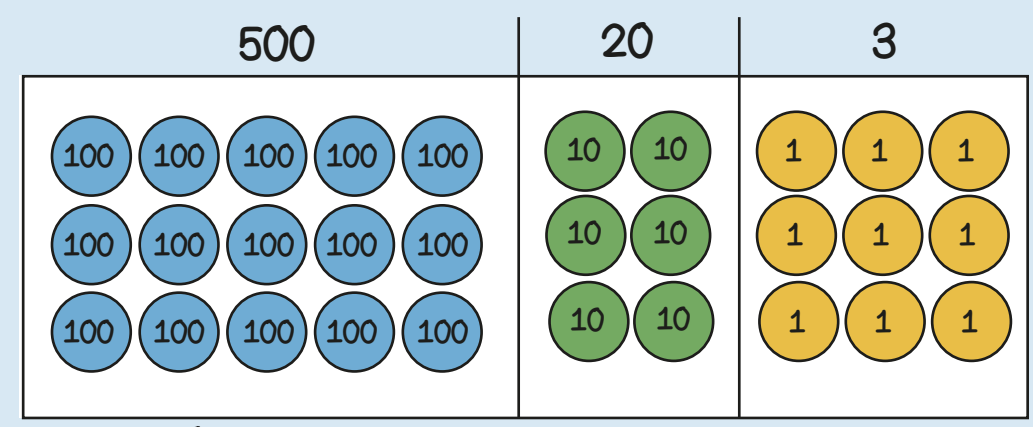
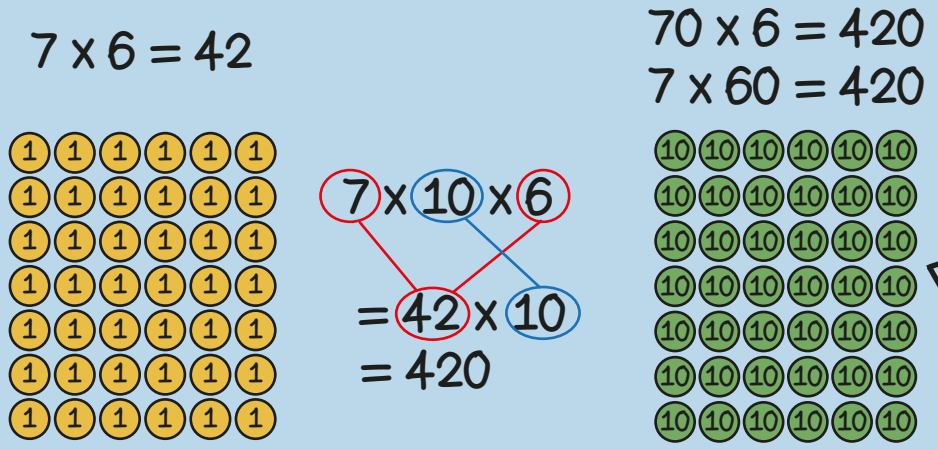
$$\begin{array}{r} 3543 \\ - 835 \\ \hline 2708 \end{array}$$

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



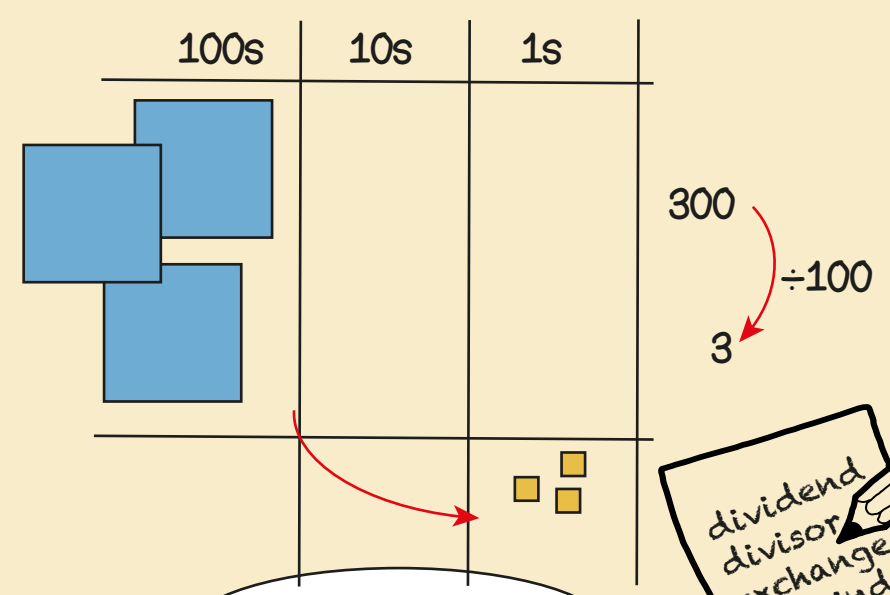
3000 is one hundred times greater than 30
2 multiplied by one hundred is 200

70 x 6 = ?
If I know 7 x 6 = 42
then I know 70 x 6 = 420
because it is ten times greater



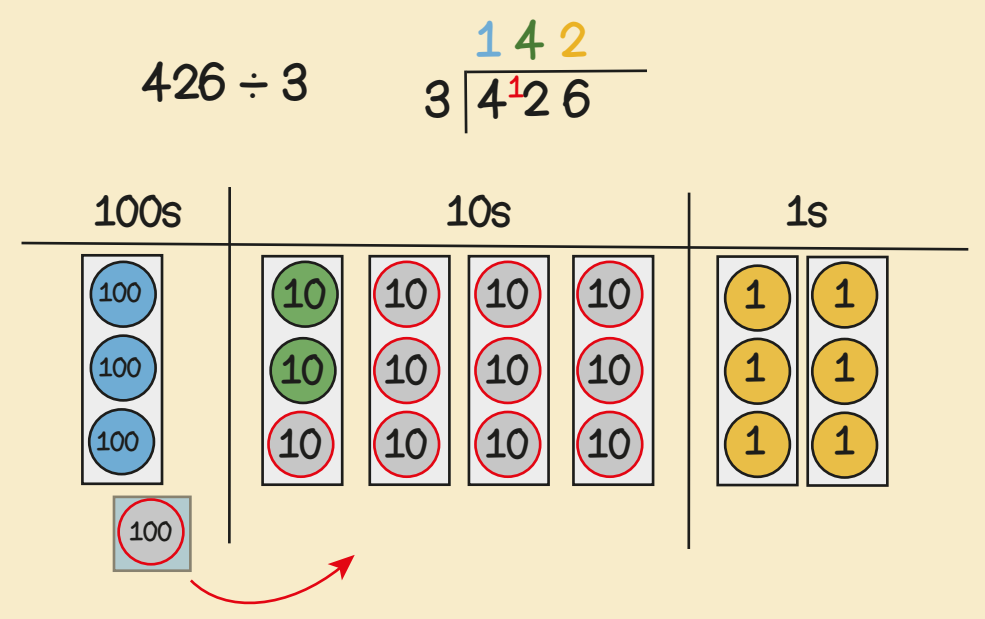
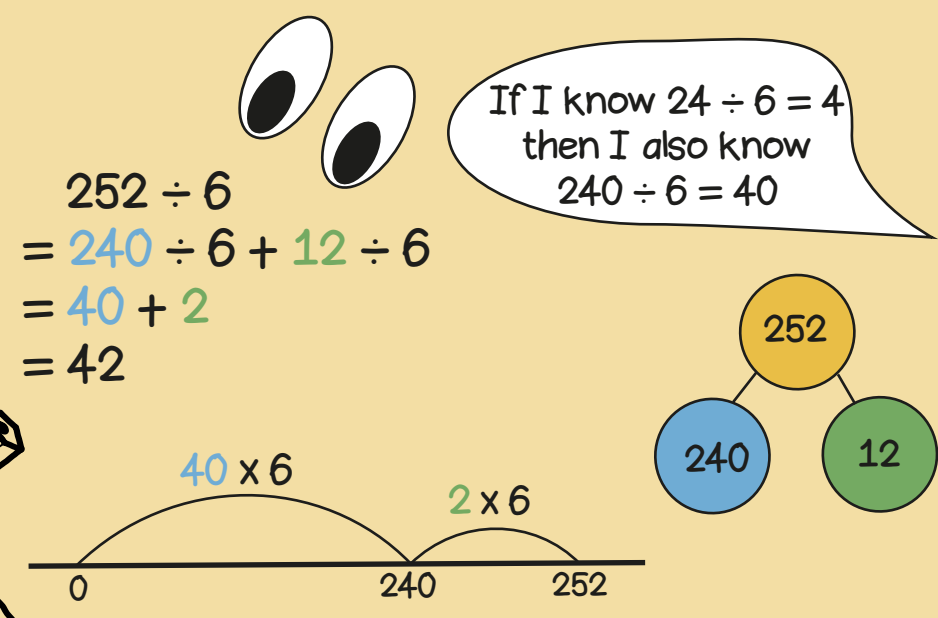
multiplier
product
regroup

$$\begin{array}{r} 523 \\ \times 3 \\ \hline 1569 \end{array}$$



3 is one hundred times smaller than 300

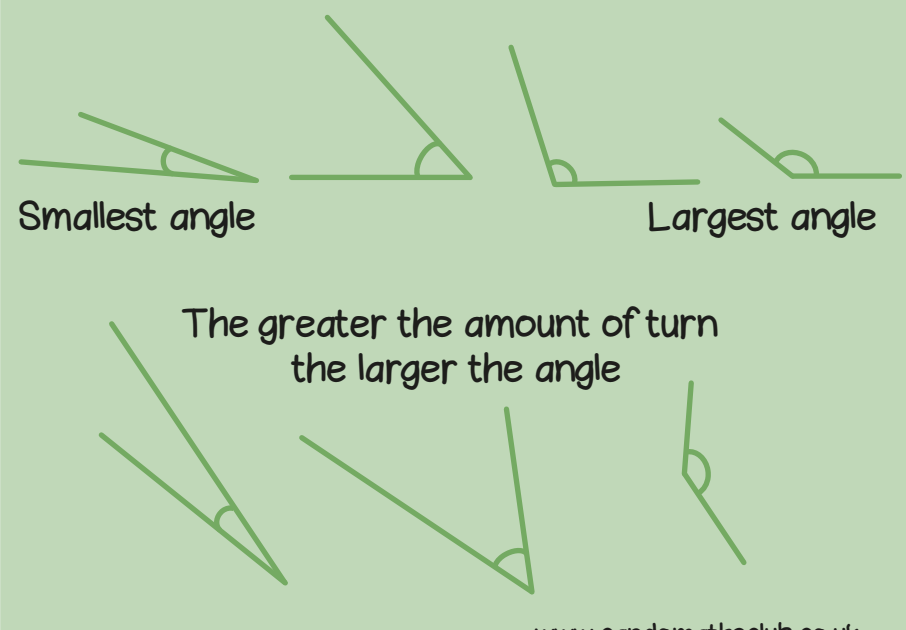
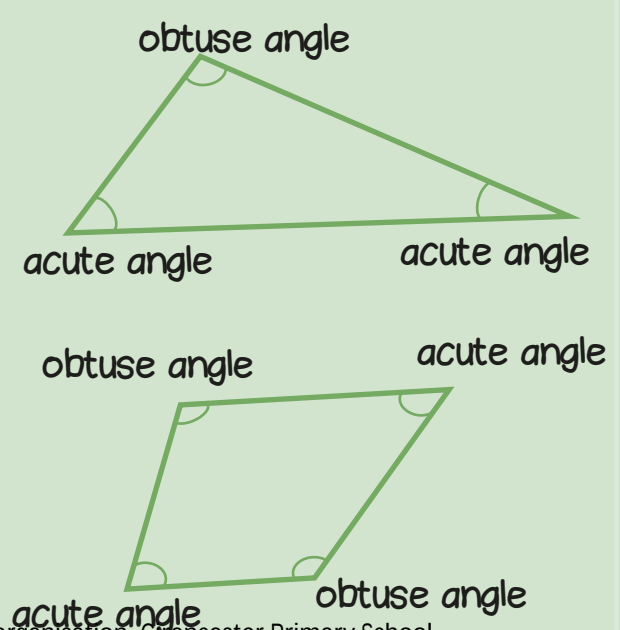
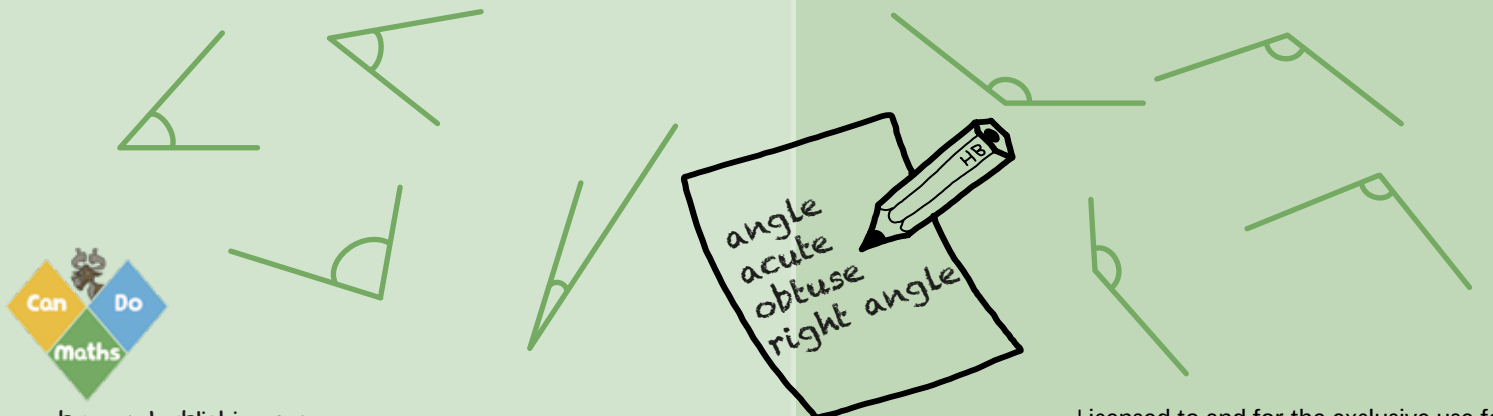
dividend
divisor
exchange
remainder
quotient

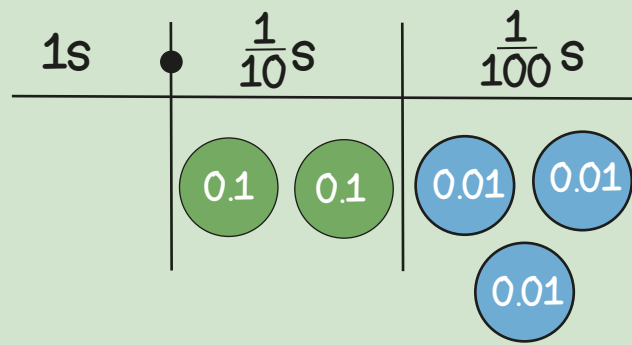
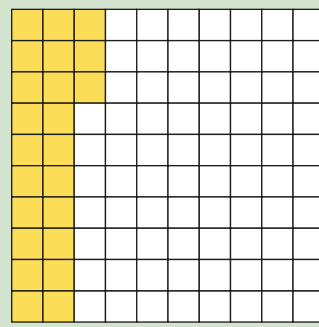
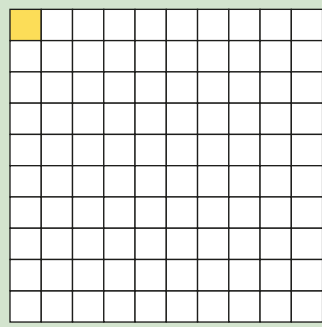


Year 4 Term 4

An acute angle is smaller than a right angle

An obtuse angle is greater than a right angle





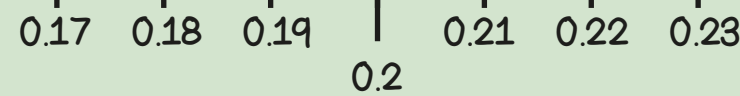
$$\frac{23}{100} = 0.23$$

one hundredth

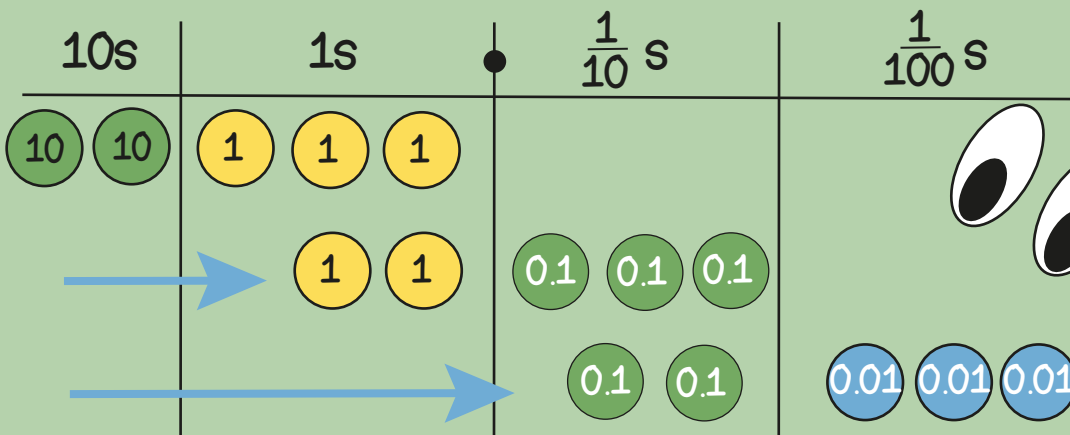
one out of 100 equal parts

one divided by one hundred

$$\frac{1}{100} = 0.01$$

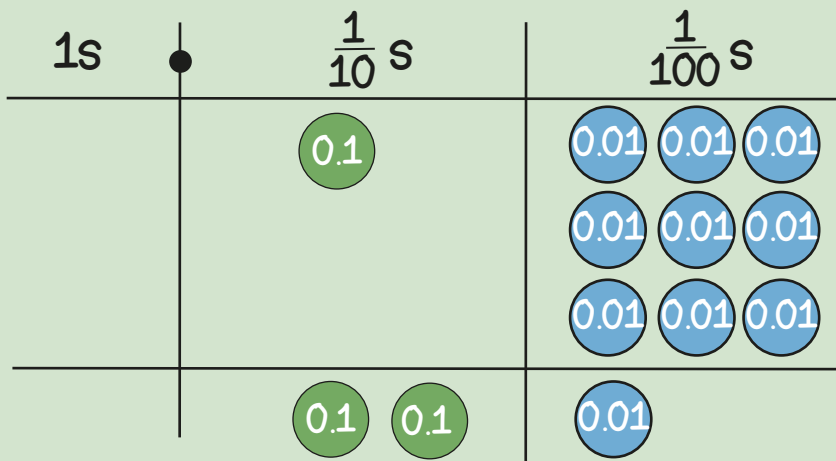


Year 4 Term 5

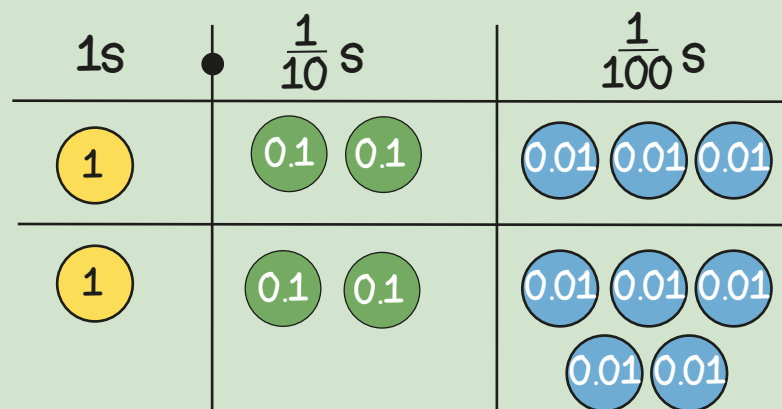


$23 \div 10 = 2.3$
move digits 1 place right

$23 \div 100 = 0.23$
move digits 2 places right

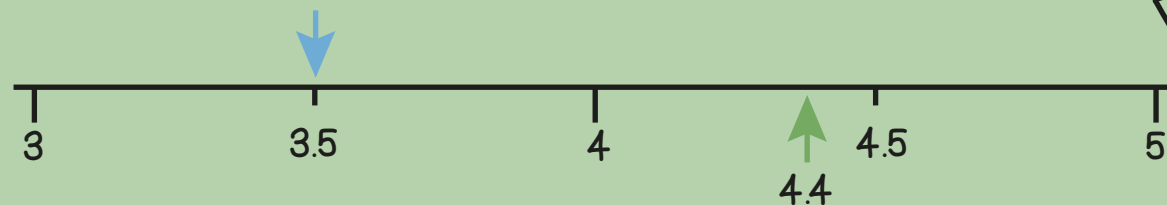


$$0.21 > 0.19$$

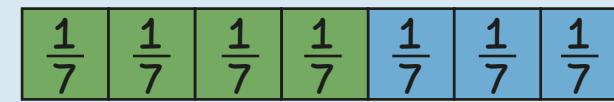
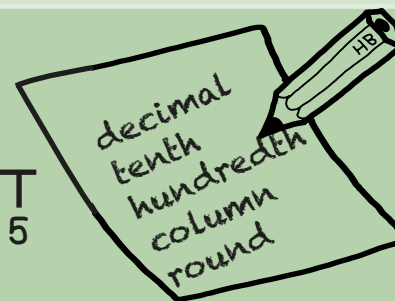


$$1.23 < 1.25$$

3.5 rounded to the nearest whole number is 4

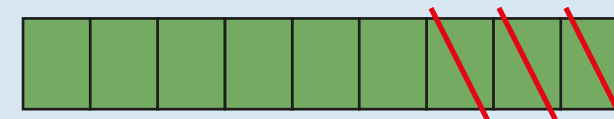


4.4 rounded to the nearest whole number is 4



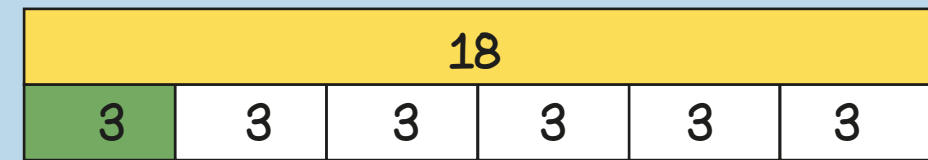
$$\frac{4}{7} + \frac{5}{7} = \frac{9}{7}$$

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

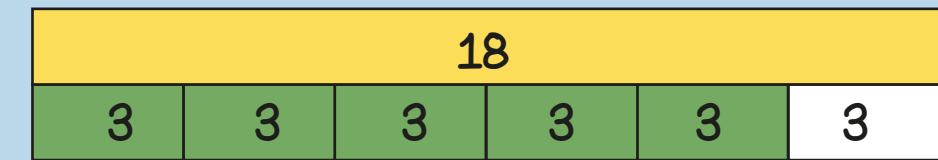


$$\frac{13}{9} - \frac{7}{9} = \frac{6}{9}$$

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

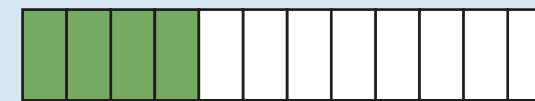
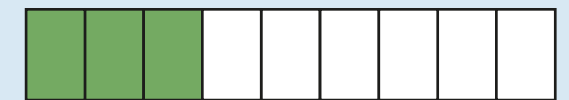
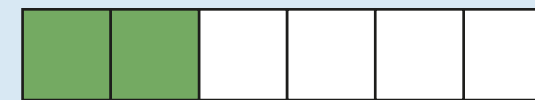


$$\frac{1}{6} \text{ of } 18 = 3$$



$$5 \times 3 = 15$$

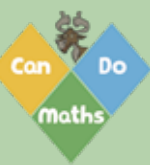
$$\frac{5}{6} \text{ of } 18 = 5 \times 3 = 15$$

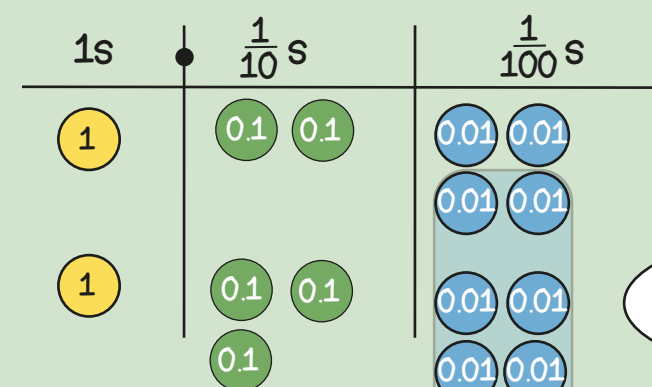


$$\frac{1}{3} = \frac{2}{6} = \frac{4}{12}$$

$$\frac{1}{3} = \frac{3}{9}$$

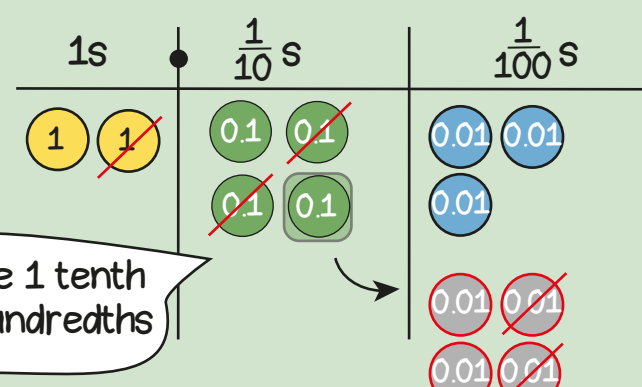
Use the same multiplier on the numerator and denominator.





$$\begin{array}{r} 1.24 \\ + 1.38 \\ \hline 2.62 \end{array}$$

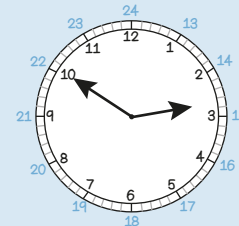
Regroup the 12 hundredths into 1 tenth and 2 hundredths



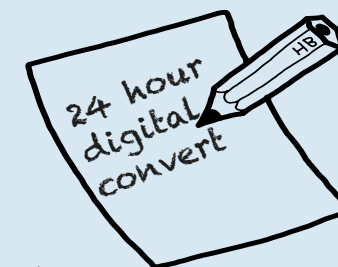
Exchange 1 tenth for 10 hundredths

$$\begin{array}{r} 2.34 \\ - 1.25 \\ \hline 1.09 \end{array}$$

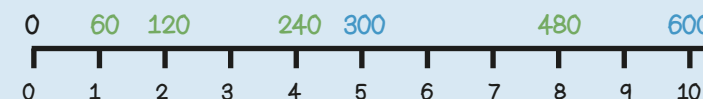
10 to 3 in the morning
2:50 a.m.
02:50



10 to 3 in the afternoon
2:50 p.m.
14:50



1 hour = 60 minutes
so 4 hours = 240 minutes

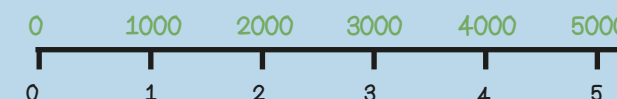


1 year = 52 weeks
so 5 years = 260 weeks



1 week = 7 days
so 4 weeks = 4 x 7 = 28 days

1 kilometre = 1000 metres
1 kilogram = 1000 grams
1 litre = 1000 millilitres



$$0.54 + 0.32 = ?$$

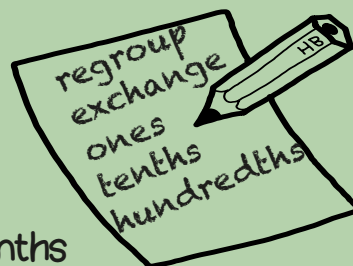
If I know $54 + 32 = 86$
then I know
54 hundredths + 32 hundredths
= 86 hundredths
so ...
 $0.54 + 0.32 = 0.86$



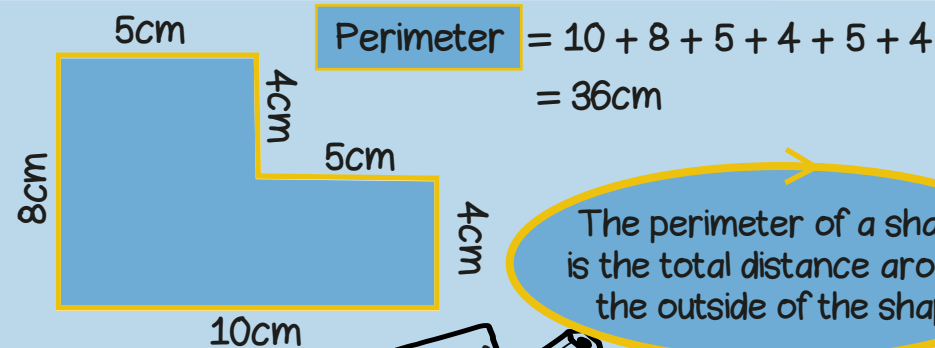
I can calculate these mentally!

$$0.9 - 0.4 = ?$$

If I know $9 - 4 = 5$
then I know
9 tenths - 4 tenths = 5 tenths
so ...
 $0.9 - 0.4 = 0.5$



Year 4 Term 6



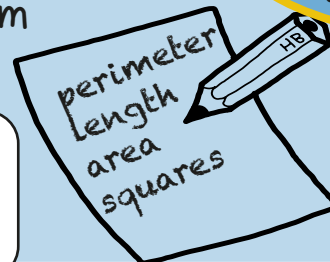
$$\text{Perimeter} = 10 + 8 + 5 + 4 + 5 + 4 = 36\text{cm}$$

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

1	2	3	4	5
6	7	8	9	10
11	12	13	14	15
16	17	18	19	20

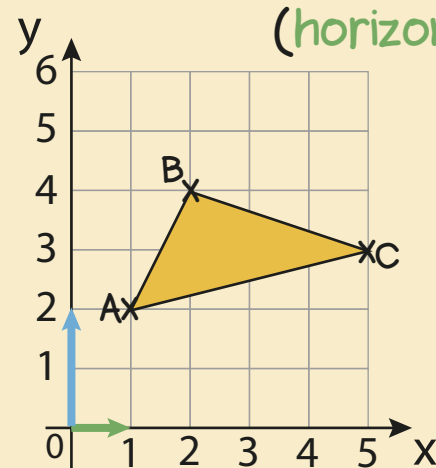
Area = 20 squares

The area of a shape is the amount of space inside a shape.



Coordinates

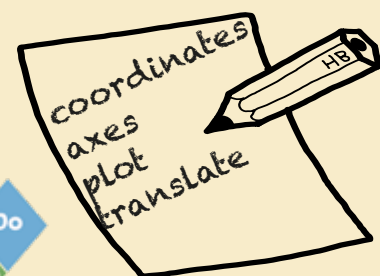
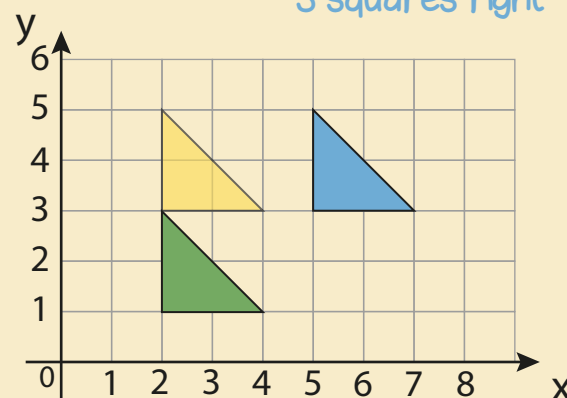
(horizontal, vertical)



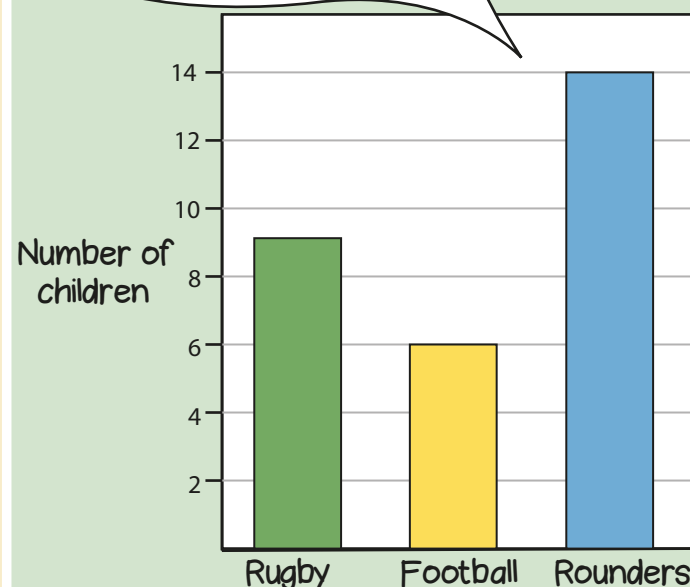
The coordinates of the points are:

A = (1, 2)
B = (2, 4)
C = (5, 3)

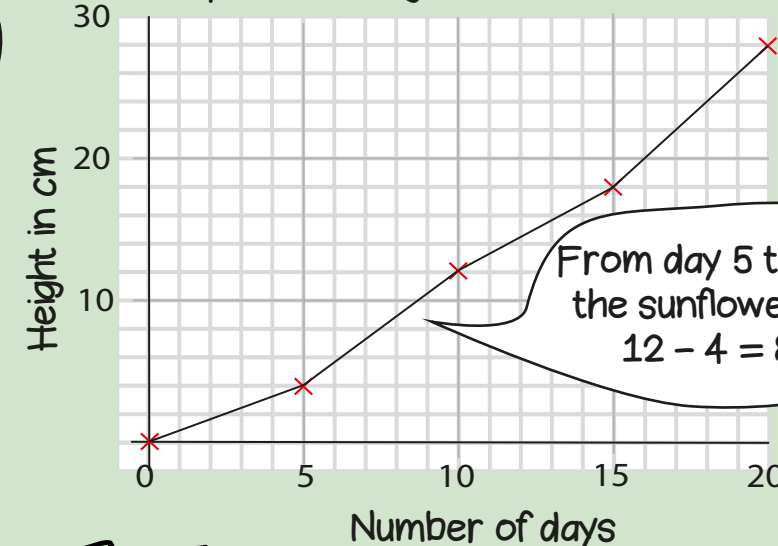
Translate the triangle
2 squares up and
3 squares right



$14 - 9 = 5$
so 5 more children like
rounders than rugby



Graph to show growth of a sunflower



From day 5 to day 10
the sunflower grows
 $12 - 4 = 8\text{ cm}$

