

# Mathematics Non-Negotiables

## Year 3

Non-negotiables are the minimum expectations that all pupils must attain by the end of year.

These prompt sheets have been designed to assist teachers with planning/assessment and as an ideal support tool for parent's evenings/progress meetings etc.

The content identifies basics to ensure children make rapid progress and access learning in other areas, as well as securing success in terms of preparing children for the next stages in their learning.

Written with age appropriate expectations in mind, they:

- focus on the basics; making a difference to progress for all children
- support teachers in recognising key areas to promote progress
- are based on the average pupil in the cohort, supporting the need for differentiation.

Non-negotiables are in no way intended to cover the entirety of the curriculum – they are an on-going reminder of key objectives for the year group. They are the basics in order to embed and support meaningful learning.

Content:

Mathematics Non-negotiables End of Year Expectations for Year 3 followed by an activity booklet containing example questions.

Did you like this resource? Don't forget to review it [here](#).

## Mathematics Non-Negotiables End of Year Expectations for Year 3

- Compare & order numbers up to 1000
- Read & write all numbers to 1000 in digits and words
- Find 10 or 100 more/less than a given number
- Count from 0 in multiples of 4, 8, 50 and 100
- Recall & use multiplication & division facts for 3, 4, 8 tables
- Recognise place value of any 3-digit number
- Add and subtract: 3-digit numbers and ones  
3-digit numbers and tens  
3-digit numbers and hundreds
- Add and subtract: Numbers with up to 3-digits using written columnar method
- Estimate and use inverse to check
- Multiply: 2-digit by 1-digit
- Count up/down in tenths
- Compare and order fractions with same denominator
- Add and subtract fractions with same denominator within one whole
- Tell time using 12 and 24 hour clocks; and using Roman numerals
- Tell time to nearest minute
- Know number of days in each month and number of seconds in a minute

## Year 3

- Compare & order numbers up to 1000

Order the numbers from smallest to largest.

237	12	999	110	300	482	862	450	96

- Read & write all numbers to 1000 in digits and words

Fill in the table with the missing digits or words

words	digits
three hundred and two	
	841
one thousand	
	388
five hundred and twenty-seven	

words	digits
	109
seven hundred and thirty-five	
two hundred and four	
	815
	999

- Find 10 or 100 more/less than a given number

Fill in the table to show 10 less and 10 more than the given number.

10 less than		10 more than
	651	
	312	
	865	
	701	

Fill in the table to show 100 less and 100 more than the given number.

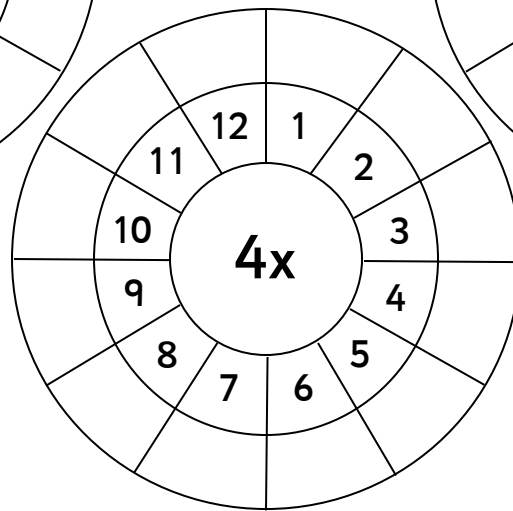
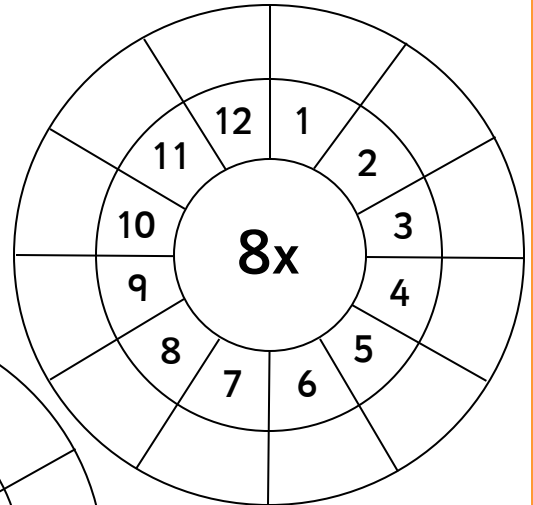
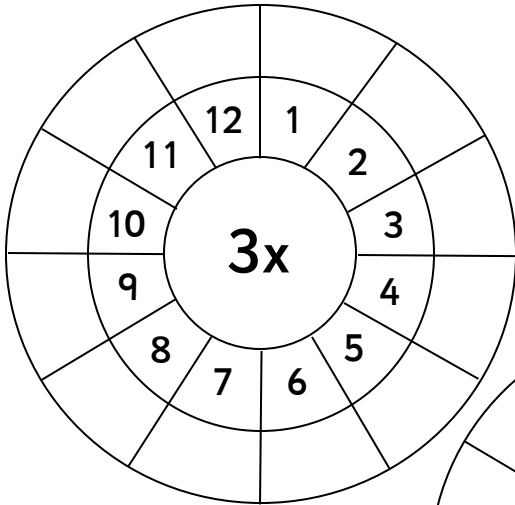
100 less than		100 more than
	900	
	164	
	599	
	731	

## Year 3

- Count from 0 in multiples of 4, 8, 50 and 100

start at zero and count in fours	start at zero and count in eights	start at zero and count in fifties	start at zero and count in hundreds
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- Recall & use multiplication & division facts for 3, 4, 8 tables



- Recognise place value of any 3-digit number

Write the digits to form the number

words	digits
five hundreds, three tens and nine ones	<input style="width: 100%; height: 20px;" type="text"/>
eight hundreds, one ten and four ones	<input style="width: 100%; height: 20px;" type="text"/>
one hundred, two tens and three ones	<input style="width: 100%; height: 20px;" type="text"/>
six hundred, no tens and six ones	<input style="width: 100%; height: 20px;" type="text"/>
no hundreds, seven tens and two ones	<input style="width: 100%; height: 20px;" type="text"/>

Write the place value words that form the given number

words	digits
<input type="text"/>	961
<input type="text"/>	157
<input type="text"/>	608
<input type="text"/>	86
<input type="text"/>	442

- Add and subtract:

- 3-digit numbers and ones

$645 + 4 = \square$

$568 - 6 = \square$

$992 - 8 = \square$

$109 - 7 = \square$

$282 + 8 = \square$

$201 - 5 = \square$

$901 + 9 = \square$

$790 - 2 = \square$

$696 + 9 = \square$

$374 - 5 = \square$

$427 - 6 = \square$

$100 - 4 = \square$

- 3-digit numbers and tens

$912 + 50 = \square$

$287 - 40 = \square$

$100 + 80 = \square$

$333 - 30 = \square$

$761 + 50 = \square$

$824 - 20 = \square$

$108 + 60 = \square$

$190 - 90 = \square$

$599 + 90 = \square$

$999 - 10 = \square$

$480 + 60 = \square$

$899 - 90 = \square$

➤ 3-digit numbers and hundreds

$354 + 200 = \square$

$213 - 200 = \square$

$900 + 100 = \square$

$699 - 400 = \square$

$463 + 300 = \square$

$804 - 500 = \square$

$105 + 800 = \square$

$968 - 700 = \square$

$670 + 200 = \square$

$772 - 500 = \square$

$531 + 400 = \square$

$520 - 500 = \square$

- Add and subtract: Numbers with up to 3-digits using written columnar method

Complete the column method addition questions

	1	4	3
+	3	3	4

	5	1	1
+	4	2	5

	7	6	5
+	1	2	2

	3	6	2
+	3	2	6

	4	4	9
+	3	3	2

	1	4	8
+	3	3	4

Complete the column method subtraction questions

	9	8	6
-	4	4	5

	7	4	1
-	5	2	1

	2	9	3
-	1	6	1

	8	7	5
-	5	5	5

	6	4	2
-	3	3	6

	5	2	7
-	2	4	2

## Year 3

- Estimate and use inverse to check

Estimate the following answers before working them out, then use addition or subtraction to find the corresponding fact to check your answer.

I estimate that  $22 + 39 =$

Addition  $22 + 39 =$   Subtraction  $61 -$    $=$

I estimate that  $71 + 58 =$

Addition   $+$    $=$   Subtraction   $-$    $=$

I estimate that  $48 + 82 =$

Addition   $+$    $=$   Subtraction   $-$    $=$

- Multiply: 2-digit by 1-digit

$36 \times 2 =$

$45 \times 5 =$

$12 \times 3 =$

$74 \times 8 =$

$27 \times 4 =$

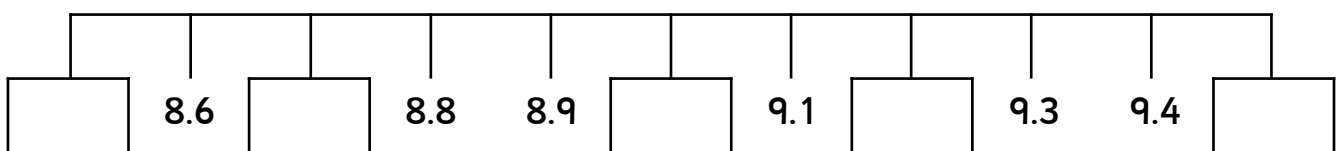
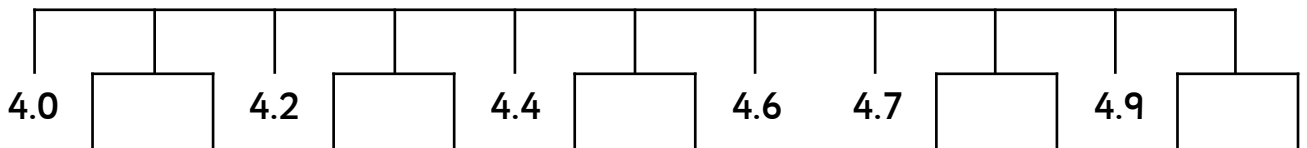
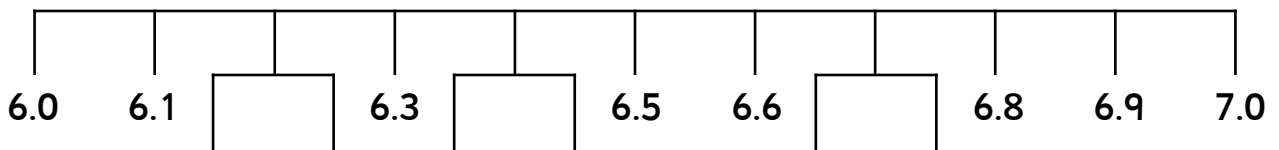
$83 \times 5 =$

$99 \times 3 =$

$53 \times 8 =$

$34 \times 2 =$

- Count up/down in tenths



## Year 3

- Compare and order fractions with same denominator

Order the fractions from smallest to largest

smallest → largest

$$\frac{2}{3} \quad 1 \quad \frac{1}{3}$$

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$$\frac{8}{9} \quad \frac{1}{9} \quad \frac{3}{9}$$

smallest → largest

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$$\frac{4}{5} \quad \frac{2}{5} \quad \frac{3}{5}$$

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$$\frac{2}{6} \quad \frac{8}{6} \quad \frac{1}{6}$$

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$$1 \quad \frac{2}{4} \quad \frac{3}{4}$$

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$$1 \quad \frac{7}{8} \quad \frac{4}{8}$$

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- Add and subtract fractions with same denominator with whole

$$\frac{3}{6} + \frac{2}{6} = \boxed{\phantom{00}}$$

$$\frac{5}{5} - \frac{2}{5} = \boxed{\phantom{00}}$$

$$\frac{7}{11} + \frac{3}{11} = \boxed{\phantom{00}}$$

$$\frac{2}{3} - \frac{1}{3} = \boxed{\phantom{00}}$$

$$\frac{5}{8} + \frac{2}{8} = \boxed{\phantom{00}}$$

$$\frac{14}{15} - \frac{9}{15} = \boxed{\phantom{00}}$$

$$\frac{4}{10} + \frac{6}{10} = \boxed{\phantom{00}}$$

$$\frac{2}{4} - \frac{1}{4} = \boxed{\phantom{00}}$$

What fraction do you need to make 1?

$$\frac{7}{11} + \frac{\boxed{\phantom{00}}}{11} = 1$$

$$\frac{13}{3} - \frac{\boxed{\phantom{00}}}{3} = 1$$

$$\frac{5}{15} + \frac{\boxed{\phantom{00}}}{15} = 1$$

$$\frac{7}{6} - \frac{\boxed{\phantom{00}}}{6} = 1$$

$$\frac{1}{4} + \frac{\boxed{\phantom{00}}}{4} = 1$$

$$\frac{\boxed{\phantom{00}}}{11} - \frac{3}{11} = 1$$

$$\frac{4}{10} + \frac{\boxed{\phantom{00}}}{10} = 1$$

$$\frac{\boxed{\phantom{00}}}{7} - \frac{1}{7} = 1$$

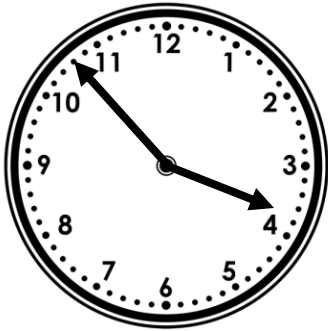
$$\frac{4}{9} + \frac{\boxed{\phantom{00}}}{9} = 1$$



## Year 3

- Tell time using 12 and 24 hour clocks; and using Roman numerals
- Tell time to nearest minute

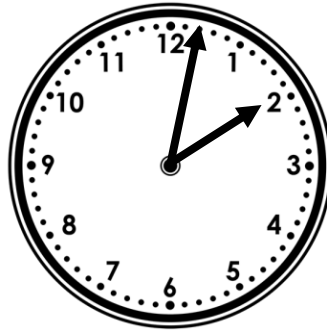
Use the 12 hour clock to write the time beneath the clocks



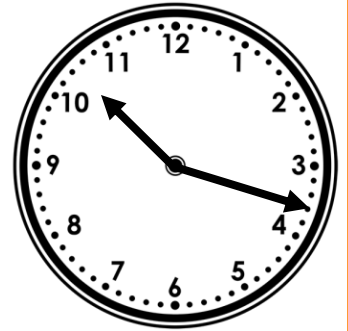
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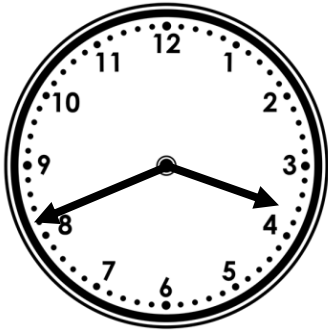


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Use the 24 hour clock to write the time beneath the clocks



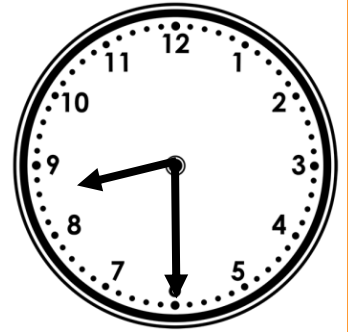
in the afternoon
:



in the evening
:

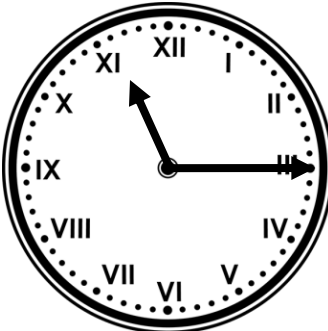


in the morning
:

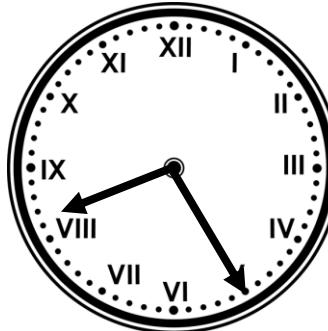


in the evening
:

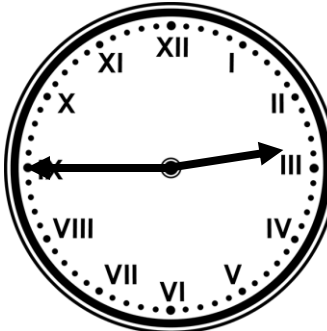
Using words, write the time beneath the roman numeral clock



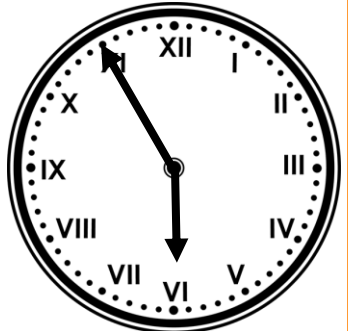
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## Year 3

- Know number of days in each month and number of seconds in a minute

How many days in each month?

January

February

March

April

May

June

July

August

September

October

November

December

How many seconds in a minute?

## Year 3

- Compare & order numbers up to 1000  
Order the numbers from smallest to largest.

237	12	999	110	300	482	862	450	96
12	96	110	237	300	482	450	862	999

- Read & write all numbers to 1000 in digits and words  
Fill in the table with the missing digits or words

words	digits
three hundred and two	302
eight hundred and forty-one	841
one thousand	1000
three hundred and eighty-eight	388
five hundred and twenty-seven	527

words	digits
one hundred and nine	109
seven hundred and thirty-five	735
two hundred and four	204
eight hundred and fifteen	815
nine hundred and ninety-nine	999

- Find 10 or 100 more/less than a given number

Fill in the table to show 10 less and 10 more than the given number.

10 less than		10 more than
641	651	661
302	312	322
855	865	875
691	701	711

Fill in the table to show 100 less and 100 more than the given number.

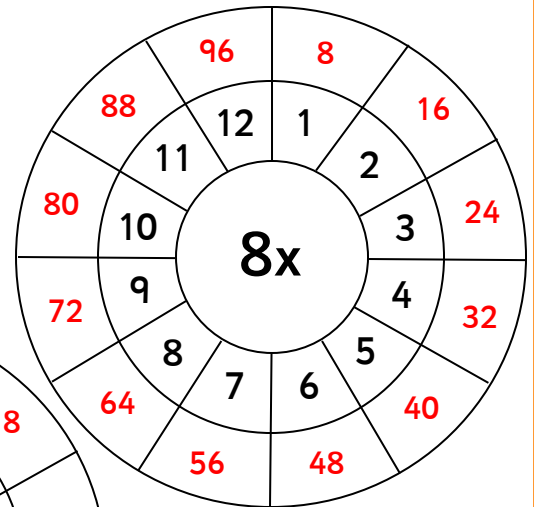
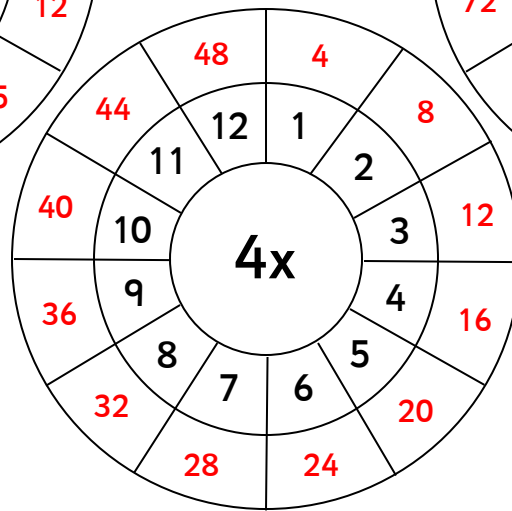
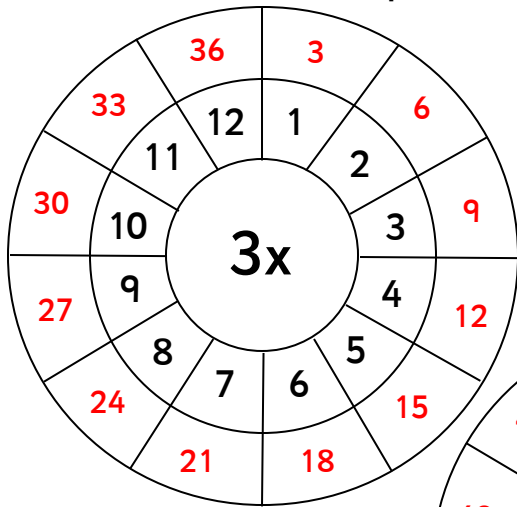
100 less than		100 more than
800	900	1000
64	164	264
499	599	699
631	731	831

## Year 3

- Count from 0 in multiples of 4, 8, 50 and 100

start at zero and count in fours	start at zero and count in eights	start at zero and count in fifties	start at zero and count in hundreds
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- Recall & use multiplication & division facts for 3, 4, 8 tables



- Recognise place value of any 3-digit number

Write the digits to form the number

words	digits
five hundreds, three tens and nine ones	<b>539</b>
eight hundreds, one ten and four ones	<b>814</b>
one hundred, two tens and three ones	<b>123</b>
six hundred, no tens and six ones	<b>606</b>
no hundreds, seven tens and two ones	<b>72</b>

Write the place value words that form the given number

words	digits
nine hundreds, six tens and one one	961
one hundred, five tens and seven ones	157
six hundreds, no tens and eight ones	608
no hundreds, eight tens and six ones	86
four hundreds, four tens and two ones	442

- Add and subtract:

- 3-digit numbers and ones

$645 + 4 = \boxed{649}$

$568 - 6 = \boxed{562}$

$992 - 8 = \boxed{984}$

$109 - 7 = \boxed{102}$

$282 + 8 = \boxed{290}$

$201 - 5 = \boxed{196}$

$901 + 9 = \boxed{910}$

$790 - 2 = \boxed{788}$

$696 + 9 = \boxed{705}$

$374 - 5 = \boxed{369}$

$427 - 6 = \boxed{421}$

$100 - 4 = \boxed{96}$

- 3-digit numbers and tens

$912 + 50 = \boxed{962}$

$287 - 40 = \boxed{247}$

$100 + 80 = \boxed{180}$

$333 - 30 = \boxed{303}$

$761 + 50 = \boxed{811}$

$824 - 20 = \boxed{804}$

$108 + 60 = \boxed{168}$

$190 - 90 = \boxed{100}$

$599 + 90 = \boxed{689}$

$999 - 10 = \boxed{989}$

$480 + 60 = \boxed{540}$

$899 - 90 = \boxed{809}$

➤ 3-digit numbers and hundreds

$354 + 200 = 554$

$213 - 200 = 13$

$900 + 100 = 1000$

$699 - 400 = 299$

$463 + 300 = 763$

$804 - 500 = 304$

$105 + 800 = 905$

$968 - 700 = 268$

$670 + 200 = 870$

$772 - 500 = 272$

$531 + 400 = 931$

$520 - 500 = 20$

- Add and subtract: Numbers with up to 3-digits using written columnar method

Complete the column method addition questions

	1	4	3
+	3	3	4
	4	7	7

	5	1	1
+	4	2	5
	9	3	6

	7	6	5
+	1	2	2
	8	8	7

	3	6	2
+	3	2	6
	6	8	8

	4	4	9
+	3	3 <sub>1</sub>	2
	7	8	1

	1	4	8
+	3	3 <sub>1</sub>	4
	4	8	2

Complete the column method subtraction questions

	9	8	6
-	4	4	5
	5	4	1

	7	4	1
-	5	2	1
	2	2	0

	2	9	3
-	1	6	1
	1	3	2

	8	7	5
-	5	5	5
	3	2	0

	6	<del>4</del> <sup>3</sup>	<sup>1</sup> 2
-	3	3	6
	3	0	6

	<del>5</del> <sup>4</sup>	<sup>1</sup> 2	7
-	2	4	2
	2	8	5

• Estimate and use inverse to check

Estimate the following answers before working them out, then use addition or subtraction to find the corresponding fact to check your answer.

I estimate that  $22 + 39 = 60$

Addition  $22 + 39 = 61$  Subtraction  $61 - 22 = 39$

I estimate that  $71 + 58 = 130$

Addition  $71 + 58 = 129$  Subtraction  $129 - 58 = 71$

I estimate that  $48 + 82 = 130$

Addition  $48 + 82 = 130$  Subtraction  $130 - 82 = 48$

• Multiply: 2-digit by 1-digit

$36 \times 2 = 72$

$45 \times 5 = 225$

$12 \times 3 = 36$

$74 \times 8 = 592$

$27 \times 4 = 108$

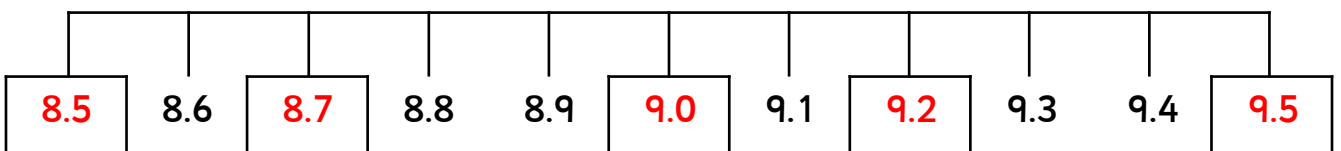
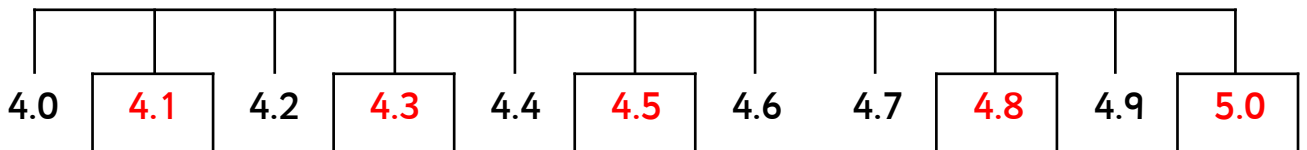
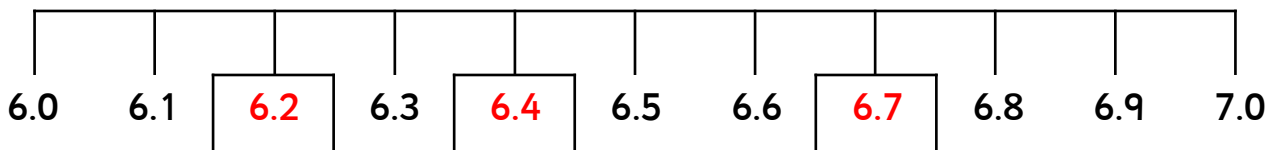
$83 \times 5 = 415$

$99 \times 3 = 297$

$53 \times 8 = 424$

$34 \times 2 = 68$

• Count up/down in tenths



## Year 3

- Compare and order fractions with same denominator

Order the fractions from smallest to largest

smallest → largest

$$\frac{2}{3} \quad 1 \quad \frac{1}{3} \quad \boxed{\frac{1}{3}} \quad \boxed{\frac{2}{3}} \quad \boxed{1}$$

$$\frac{4}{5} \quad \frac{2}{5} \quad \frac{3}{5} \quad \boxed{\frac{2}{5}} \quad \boxed{\frac{3}{5}} \quad \boxed{\frac{4}{5}}$$

$$1 \quad \frac{2}{4} \quad \frac{3}{4} \quad \boxed{\frac{2}{4}} \quad \boxed{\frac{3}{4}} \quad \boxed{1}$$

smallest → largest

$$\frac{8}{9} \quad \frac{1}{9} \quad \frac{3}{9} \quad \boxed{\frac{1}{9}} \quad \boxed{\frac{3}{9}} \quad \boxed{\frac{8}{9}}$$

$$\frac{2}{6} \quad \frac{8}{6} \quad \frac{1}{6} \quad \boxed{\frac{1}{6}} \quad \boxed{\frac{2}{6}} \quad \boxed{\frac{8}{6}}$$

$$1 \quad \frac{7}{8} \quad \frac{4}{8} \quad \boxed{\frac{4}{8}} \quad \boxed{\frac{7}{8}} \quad \boxed{1}$$

- Add and subtract fractions with same denominator with whole

$$\frac{3}{6} + \frac{2}{6} = \boxed{\frac{5}{6}} \quad \frac{5}{5} - \frac{2}{5} = \boxed{\frac{3}{5}}$$

$$\frac{7}{11} + \frac{3}{11} = \boxed{\frac{10}{11}} \quad \frac{2}{3} - \frac{1}{3} = \boxed{\frac{1}{3}}$$

$$\frac{5}{8} + \frac{2}{8} = \boxed{\frac{7}{8}} \quad \frac{14}{15} - \frac{9}{15} = \boxed{\frac{5}{15}}$$

$$\frac{4}{10} + \frac{6}{10} = \boxed{\frac{10}{10}} \quad \frac{2}{4} - \frac{1}{4} = \boxed{\frac{1}{4}}$$

What fraction do you need to make 1?

$$\frac{7}{11} + \boxed{\frac{3}{11}} = 1 \quad \frac{13}{3} - \boxed{\frac{10}{3}} = 1 \quad \frac{5}{15} + \boxed{\frac{10}{15}} = 1$$

$$\frac{7}{6} - \boxed{\frac{1}{6}} = 1 \quad \frac{1}{4} + \boxed{\frac{3}{4}} = 1 \quad \boxed{\frac{14}{11}} - \frac{3}{11} = 1$$

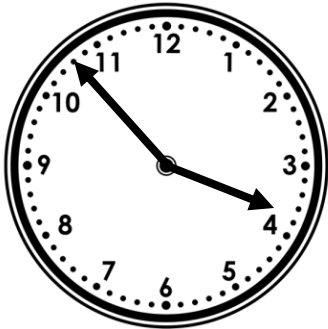
$$\frac{4}{10} + \boxed{\frac{6}{10}} = 1 \quad \boxed{\frac{8}{7}} - \frac{1}{7} = 1 \quad \frac{4}{9} + \boxed{\frac{5}{9}} = 1$$



## Year 3

- Tell time using 12 and 24 hour clocks; and using Roman numerals
- Tell time to nearest minute

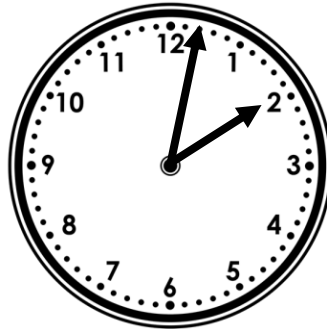
Use the 12 hour clock to write the time beneath the clocks



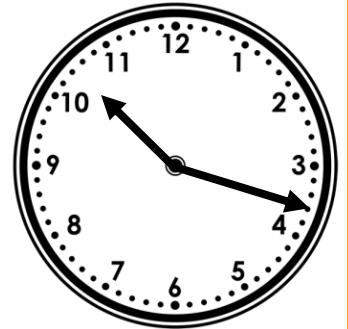
3:53



12:34

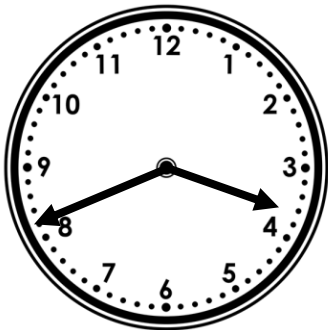


2:02



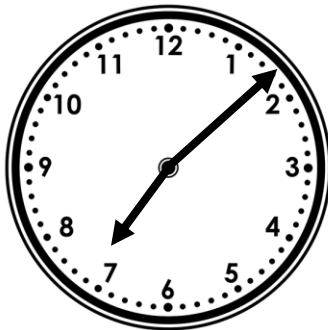
10:18

Use the 24 hour clock to write the time beneath the clocks



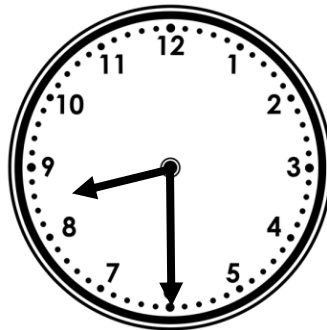
in the afternoon

15:41



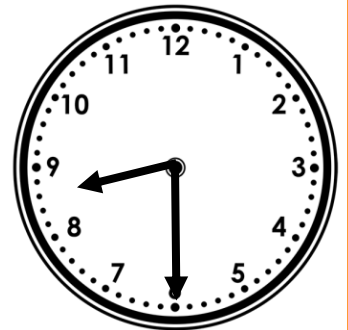
in the evening

19:08



in the morning

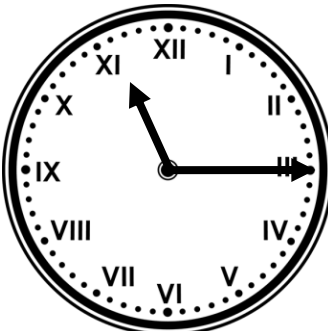
08:30



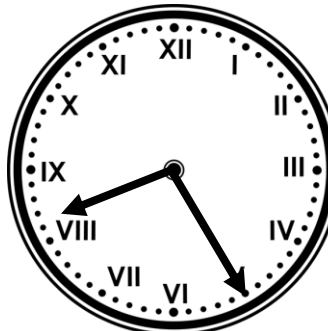
in the evening

20:30

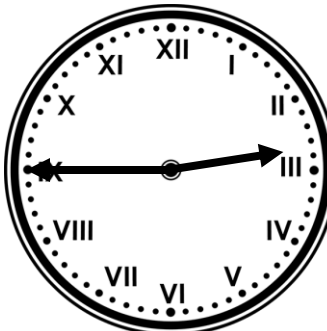
Using words, write the time beneath the roman numeral clock



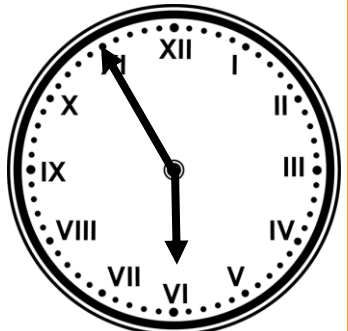
quarter past eleven



twenty-five past eight



quarter to three



five to six

## Year 3

- Know number of days in each month and number of seconds in a minute

How many days in each month?

January

February

March

April

May

June

July

August

September

October

November

December

How many seconds in a minute?