

# Year 6 Maths Prompts:

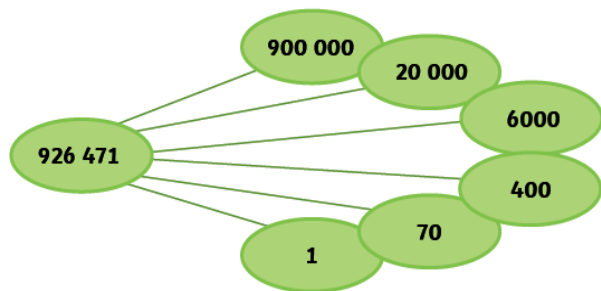
## 18th – 22nd May and 1st– 5th June 2020

During these 2 weeks we are revisiting our addition and subtraction knowledge. This includes decimals and fractions, so these pages of maths prompts are here to provide you with key reminders on these topics too. Where relevant, we have included links to websites where you can watch videos and / or read through additional information before tackling the tasks that you have been assigned on mathematics and Purple Mash.

### 926 471

Hundred Thousands	Ten Thousands	Thousands	Hundreds	Tens	Ones
9	2	6	4	7	1

nine hundred and twenty-six thousand, four hundred and seventy-one



Mrs Town's maths group may find these BBC Bitesize learner's guides helpful reminders; for one each there is a video to watch then you can scroll down to read the information underneath:



[‘What is column addition?’](#)

[‘How to use column subtraction.’](#)



[‘What are decimals?’](#)

[‘What are negative numbers?’](#)



## Add and Subtract Whole Numbers

### Column Method

	4	5	8	6	4
+	2	3	4	9	7
	6	9	3	6	1
		1	1	1	

Starting with the ones, add each column in turn. Regroup tens, hundreds, thousands, ten thousands as required.

	3	5	<sup>6</sup> 7	<sup>13</sup> 4	<sup>1</sup> 2
-		3	4	7	6
	3	2	2	6	6

Starting with the ones, subtract each column in turn. Exchange tens, hundreds, thousands and/or ten thousands as required.



## Rounding and estimating




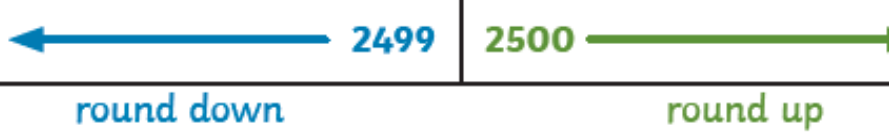
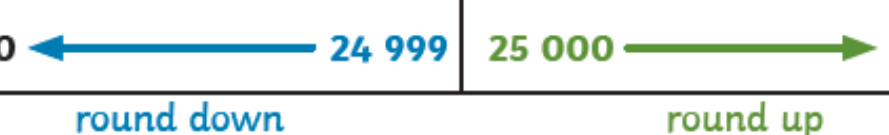
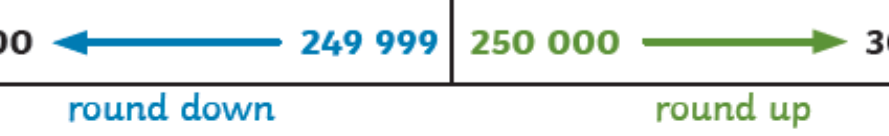

Estimating the answer before you attempt a calculation is key to spotting or avoiding errors in your addition and subtraction work.

Some useful BBC Bitesize learner's guides:

[How to round numbers.](#)

[How to round decimal numbers.](#)

[How to use estimation to check your answers.](#)

Rounding												
 visit <a href="https://www.twinkl.com">twinkl.com</a>												
Rounding to the nearest 10												
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2 000 000	←	2 499 999	→	2 500 000	→	3 000 000						

# Decimals Reminders:

### Place Value

Tens	Ones	tenths	hundredths	thousandths
	● ● ●	● ● ● ●	● ●	● ● ● ● ● ●

$3 + \frac{4}{10} + \frac{2}{100} + \frac{6}{1000} \leftarrow 3.426 \rightarrow 3 + 0.4 + 0.02 + 0.006$

1	2	3	4	5	6	7	8	9
0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9
0.01	0.02	0.03	0.04	0.05	0.06	0.07	0.08	0.09
0.001	0.002	0.003	0.004	0.005	0.006	0.007	0.008	0.009

visit [twinkl.com](https://www.twinkl.com)

Place value is the most important thing when adding and subtracting decimals; as long as you have your digits in the correct place then the method is the same.

It is also important to remember the connections between fractions and decimals (and % too, but we will look at that next time).

### Decimal Numbers as Fractions

0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1
$\frac{1}{10}$	$\frac{1}{10}$	$\frac{1}{10}$	$\frac{1}{10}$	$\frac{1}{10}$	$\frac{1}{10}$	$\frac{1}{10}$	$\frac{1}{10}$	$\frac{1}{10}$	$\frac{1}{10}$
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
$\frac{1}{10}$	$\frac{2}{10}$	$\frac{3}{10}$	$\frac{4}{10}$	$\frac{5}{10}$	$\frac{6}{10}$	$\frac{7}{10}$	$\frac{8}{10}$	$\frac{9}{10}$	1
	$\frac{1}{5}$		$\frac{2}{5}$	$\frac{1}{2}$	$\frac{3}{5}$		$\frac{4}{5}$		

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

$\frac{50}{100} = \frac{1}{2} = 0.5$

$\frac{25}{100} = \frac{1}{4} = 0.25$

$\frac{75}{100} = \frac{3}{4} = 0.75$

$\frac{20}{100} = \frac{1}{5} = 0.2$

$\frac{1}{3} = 0.33$

$\frac{1}{8} = 0.125$

$\frac{1}{1000} = 0.001$

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### Fractions to Decimals

$\frac{7}{20} = \frac{35}{100} \text{ or } 0.35$ 

(multiplied by 5)

$\frac{7}{25} = \frac{28}{100} \text{ or } 0.28$ 

(multiplied by 4)

$\frac{7}{50} = \frac{14}{100} \text{ or } 0.14$ 

(multiplied by 2)

$\frac{8}{200} = \frac{4}{100} \text{ or } 0.04$ 

(divided by 2)

When the denominator is not a factor or multiple of 100


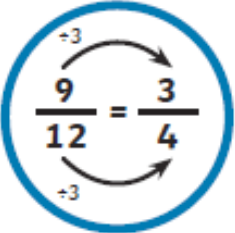




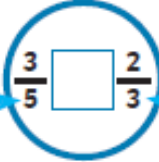


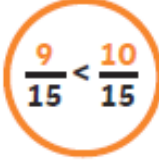



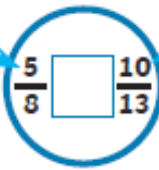
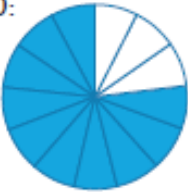

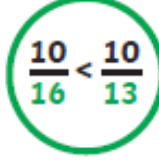
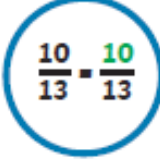


$\frac{7}{8} = 7 \div 8$

	0	8	7	5
8	7	0	6	0

visit [twinkl.com](https://www.twinkl.com)

# Fractions Reminders / Prompts:

Here are some basic reminders about fractions (taken from twinkl.com). For further support with this, click here <https://whiterosemaths.com/homelearning/year-6/> - go to 'Summer Term-Week 3 (w/c 4th May)' and watch the videos for simplifying and comparing fractions (Lesson 1 and Lesson 2.) OR this simple [BBC Bitesize learner's guide](#).

Simplify Fractions	Compare and Order Fractions
<div style="text-align: center;">  <p><b>Factors of 9:</b> 1, 3, 9</p> <p><b>Factors of 12:</b> 1, 2, 3, 4, 6, 12</p> <div style="text-align: center;">  </div> <div style="display: flex; justify-content: space-around; margin-top: 10px;"> <div style="text-align: center;">  </div> <div style="text-align: center;">  </div> </div> <div style="text-align: center; margin-top: 10px;">  visit <a href="https://www.twinkl.com">twinkl.com</a> </div> </div>	<p><b>Use the Common Denominator</b></p> <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">  <p>Multiples of 5: 5, 10, 15</p> </div> <div style="text-align: center;">  </div> <div style="text-align: center;">  <p>Multiples of 3: 3, 6, 9, 12, 15</p> </div> </div> <div style="display: flex; justify-content: space-around; align-items: center; margin-top: 10px;"> <div style="text-align: center;">  </div> <div style="text-align: center;">  </div> <div style="text-align: center;">  </div> </div> <div style="text-align: center; margin-top: 10px;">  </div> <p><b>Use the Common Numerator</b></p> <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">  <p>Multiples of 5: 5, 10, 15</p> </div> <div style="text-align: center;">  </div> <div style="text-align: center;">  <p>Multiples of 10: 10, 20</p> </div> </div> <div style="display: flex; justify-content: space-around; align-items: center; margin-top: 10px;"> <div style="text-align: center;">  </div> <div style="text-align: center;">  </div> <div style="text-align: center;">  </div> </div> <div style="display: flex; justify-content: space-around; align-items: center; margin-top: 10px;"> <div style="text-align: center;">  </div> <div style="text-align: center;">  </div> </div>

As a part of our last adventure trail, we revised factors. When working with fractions we use these and multiples frequently. If you are still feeling a little wobbly on factors have a look at the [BBC Bitesize](#) learner's guide to help you feel a little more confident.

## Common Factors

Factors of 48

1	2	3	4	6	8	12	16	24	48
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Factors of 30

1	2	3	5	6	10	15	30
---	---	---	---	---	----	----	----

Common factors: 1, 2, 3, 6

## Common Multiples

Multiples of 3

3	...	18	21	24	...	39	42
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Multiples of 7


7	14	21	28	35	42
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Common multiples: 21, 42...

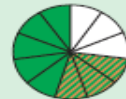
Below you will find examples taken from twinkl.com on how to add and subtract fractions. For further support with this, click here <https://whiterosemaths.com/homelearning/year-6/> - go to 'Summer Term-Week 3 (w/c 4th May) and watch the videos for adding and subtracting fractions (Lesson 3 and Lesson 4.) OR this simple [BBC Bitesize learner's guide](#).

## Adding and Subtracting Proper Fractions

### Same Denominators



$$\frac{4}{7} + \frac{2}{7} = \frac{6}{7}$$



$$\frac{8}{11} - \frac{3}{11} = \frac{5}{11}$$

### Different Denominators

$$\frac{2}{7} + \frac{3}{5}$$

Multiples of 7: 7, 14, 21, 28, **35**  
 Multiples of 5: 5, 10, 15, 20, 25, 30, **35**

$$\frac{2}{7} = \frac{10}{35}, \quad \frac{3}{5} = \frac{21}{35}$$

$$\frac{10}{35} + \frac{21}{35} = \frac{31}{35}$$

$$\frac{9}{10} - \frac{1}{4}$$

Multiples of 10: 10, **20**  
 Multiples of 4: 4, 8, 12, 16, **20**

$$\frac{9}{10} = \frac{18}{20}, \quad \frac{1}{4} = \frac{5}{20}$$

$$\frac{18}{20} - \frac{5}{20} = \frac{13}{20}$$

twinkl visit [twinkl.com](https://www.twinkl.com)

## Adding and Subtracting Mixed Numbers

Add or subtract the whole numbers and fractions separately.

$$2\frac{2}{5} + 1\frac{3}{10}$$

$$2 + 1 = 3$$

$$\frac{2}{5} + \frac{3}{10} = \frac{4}{10} + \frac{3}{10} = \frac{7}{10}$$

$$3 + \frac{7}{10} = 3\frac{7}{10}$$

$$2\frac{1}{2} - 1\frac{1}{4}$$

$$2 - 1 = 1$$

$$\frac{1}{2} - \frac{1}{4} = \frac{2}{4} - \frac{1}{4} = \frac{1}{4}$$

$$1 + \frac{1}{4} = 1\frac{1}{4}$$

Convert the mixed numbers to improper fractions.

$$2\frac{2}{5} + 1\frac{3}{10}$$

$$2\frac{1}{2} - 1\frac{1}{4}$$

$$2\frac{2}{5} = \frac{12}{5}$$

$$1\frac{3}{10} = \frac{13}{10}$$

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

$$1\frac{1}{4} = \frac{5}{4}$$

$$\frac{12}{5} + \frac{13}{10} = \frac{24}{10} + \frac{13}{10} = \frac{37}{10}$$

$$\frac{5}{2} - \frac{5}{4} = \frac{10}{4} - \frac{5}{4} = \frac{5}{4}$$

$$\frac{37}{10} = 3\frac{7}{10}$$

$$\frac{5}{4} = 1\frac{1}{4}$$

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