



Ark Globe
Academy

Year 7 Maths
Foundation Tier
Ark Globe Academy
Remote Learning Pack
Phase V

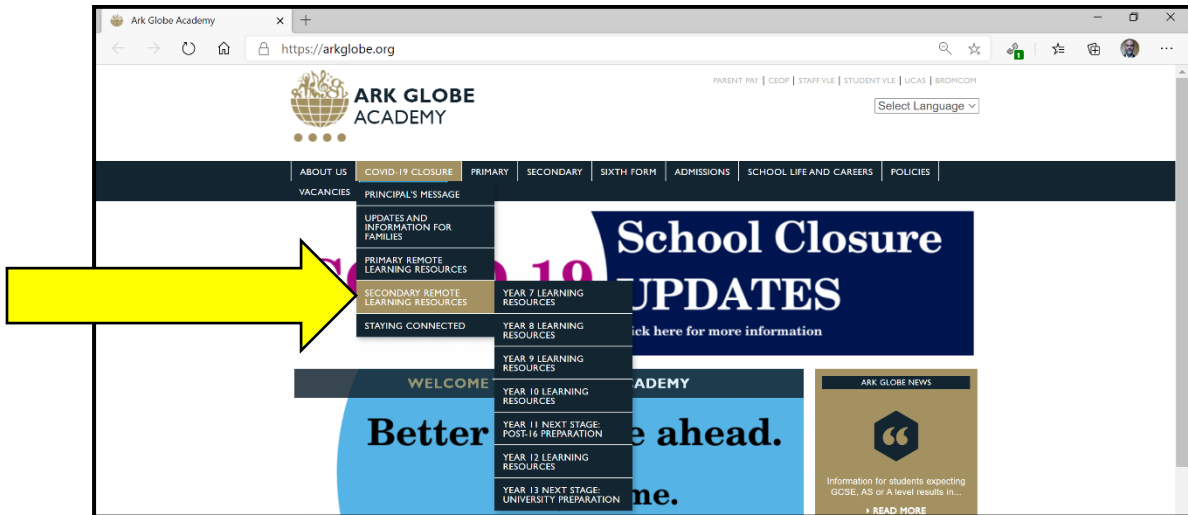
Monday 29 June – Friday 10 July



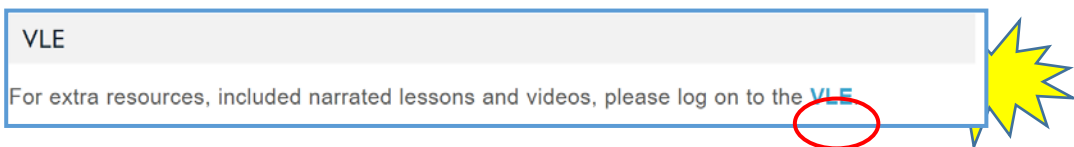
| Day | Title | Objective | Resource provided | Outcome | On-Line Support |
|------------|--|---|--|---|--|
| 1 | Simplifying Fractions | To practise simplifying fractions | Annotated resources on the VLE and Questions in pack below | Do now and practice questions completed | <p>Scan the QR code below with your phone camera and click on the link which appears to find a video by Ms Lascelles-Brown</p>  <p>This video can also be found on the VLE by following the guide below</p> |
| 2 | Multiplying Fractions | To be able to multiply fractions | Annotated resources on the VLE and Questions in pack below | Do now and practice questions completed | |
| 3 | Dividing Fractions | To be able to divide fractions | Annotated resources on the VLE and Questions in pack below | Do now and practice questions completed | |
| 4 | Converting Mixed number to Improper fractions | To be able to convert mixed number into improper fractions | Annotated resources on the VLE and Questions in pack below | Do now and practice questions completed | |
| 5 | Converting Improper fractions to Mixed numbers | To be able to convert improper fractions into mixed numbers | Annotated resources on the VLE and Questions in pack below | Do now and practice questions completed | |
| 6 | Adding fractions | To be able to add fractions with the same denominator | Annotated resources on the VLE and Questions in pack below | Do now and practice questions completed | <p>Scan the QR code below with your phone camera and click on the link which appears to find a video by Ms Lascelles-Brown</p>  <p>This video can also be found on the VLE by following the guide below</p> |
| 7 | Subtracting fractions | To be able to subtract fractions with the same denominator | Annotated resources on the VLE and Questions in pack below | Do now and practice questions completed | |
| 8 | Fractions review | To practise a range of fractions questions included worded ones | Annotated resources on the VLE and Questions in pack below | Do now and practice questions completed | |
| 9 | Sequences – rule | To be able to find the rule in a given sequence | Annotated resources on the VLE and Questions in pack below | Do now and practice questions completed | |
| 10 | Sequences – next term | To be able to find the next term in a sequence | Annotated resources on the VLE and Questions in pack below | Do now and practice questions completed | |

Step by step: How to access annotated resources

Step 1: On the school website go to the 'COVID-19 CLOSURE' then choose 'SECONDARY REMOTE LEARNING RESOURCES' and then choose the link for your year group.

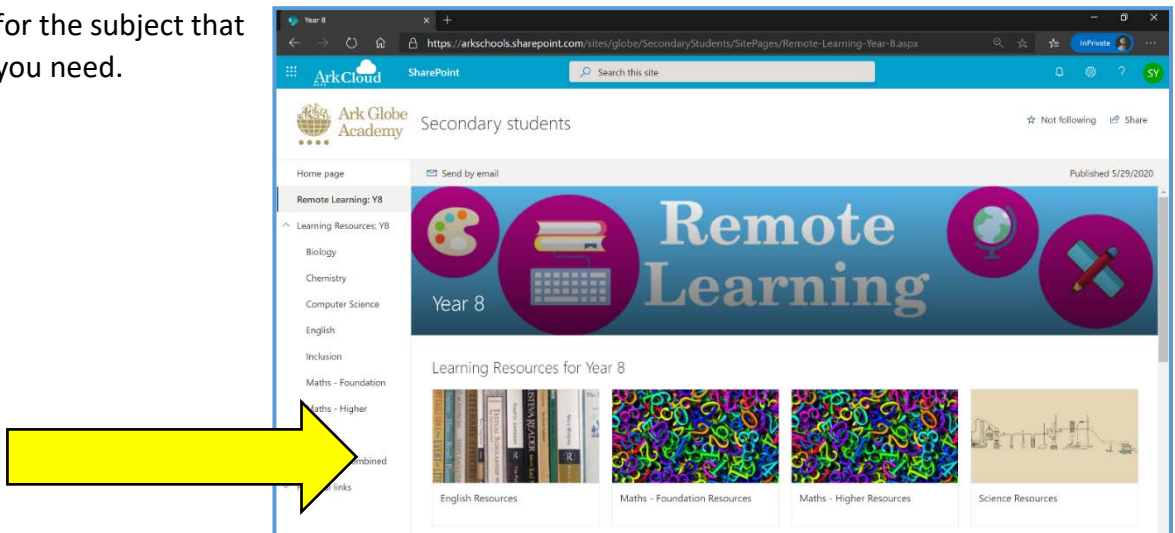


Step 2: At **THE BOTTOM OF THE PAGE** there is a link to the VLE.



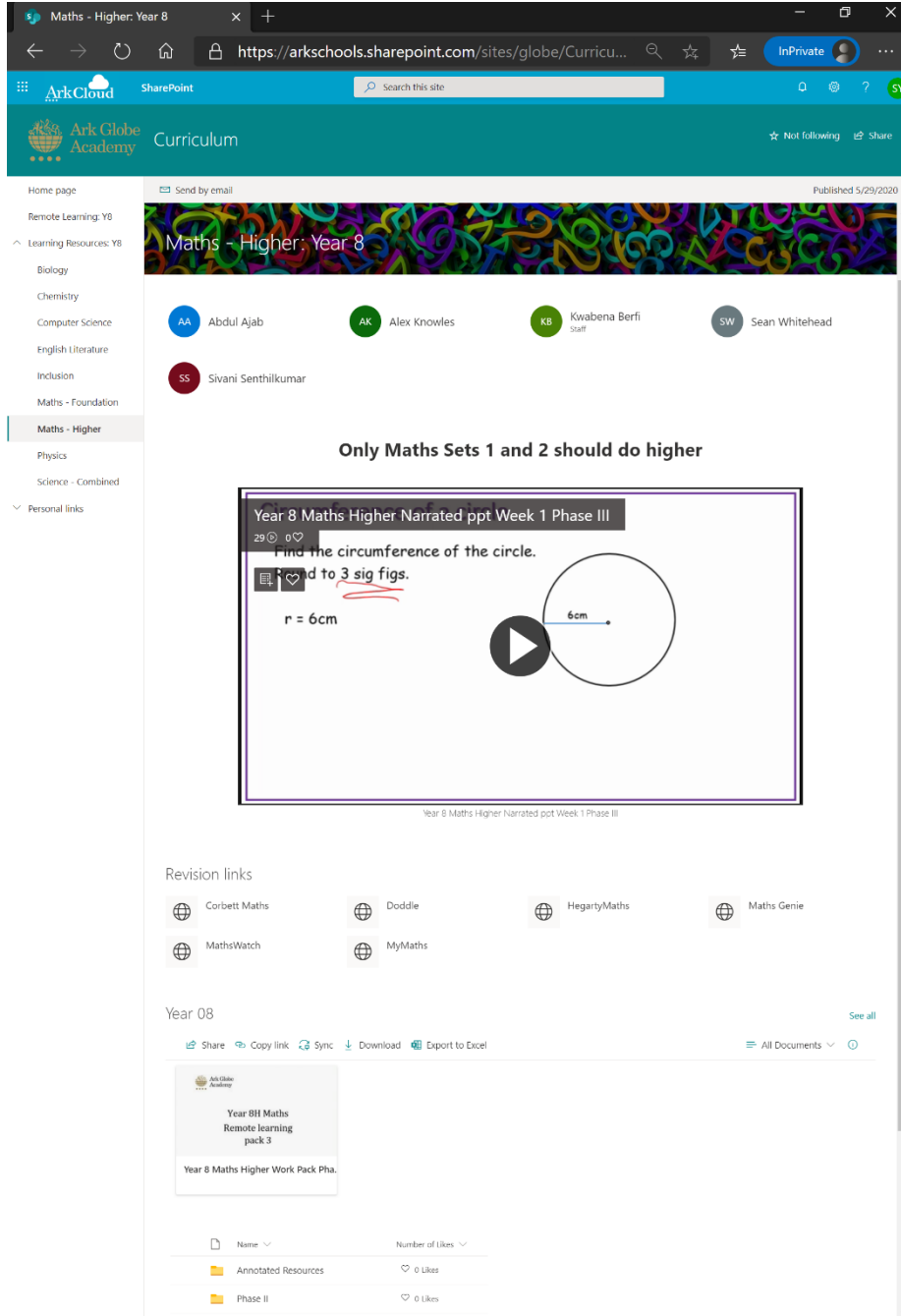
Step 3: Log on to the VLE using your school email address and the same password you use to log into the school computers. **If you are unable to login let your LF lead know.**

Step 4: You will then see the 'Remote Learning' page for your year group. Click on the link for the subject that you need.



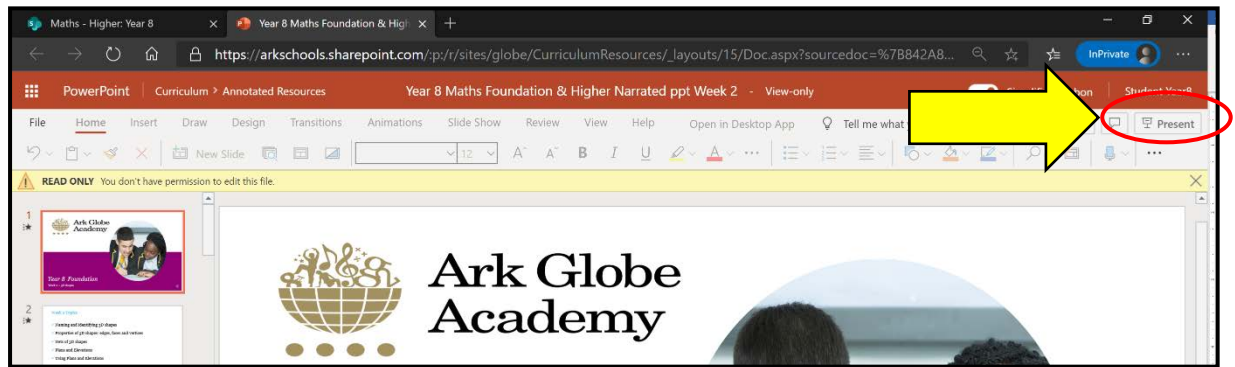
Step 5: You will then see the **Learning Resources for the subject** – these vary slightly but you may see:

- If there is a video, it will appear on the first page – just press Play ▶ to watch this



The screenshot shows a SharePoint page titled 'Maths - Higher: Year 8'. The page features a navigation menu on the left with categories like 'Remote Learning: Y8', 'Learning Resources: Y8', and 'Maths - Higher'. The main content area displays a video player with a play button. The video title is 'Year 8 Maths Higher Narrated ppt Week 1 Phase III'. The video content shows a math problem: 'Find the circumference of the circle. Give your answer to 3 sig figs. r = 6cm'. A diagram of a circle with a radius of 6cm is also shown. Below the video player, there are 'Revision links' to various resources like Corbett Maths, Doodle, Hegarty/Maths, Maths Genie, MathsWatch, and MyMaths. At the bottom, there is a 'Year 08' section with a list of documents, including 'Year 8H Maths Remote learning pack 3' and 'Year 8 Maths Higher Work Pack Pha.'.

Step 6: To view **annotated PowerPoints**, open the correct file for the week you are on. Once you have opened the file, you can press the 'Present' button (top right, circled in red) to watch the PowerPoint. Make sure your **sound is on** so you can hear your teacher!



Step 7: Watch the part of the presentation for the day you are on, then complete the task in your work pack.



Day 1 - Simplifying Fractions

- 1 Work out 5×4
- 2 Work out $624 + 254 =$
- 3 Work out $854 - 245 =$
- 4 Complete using $<$ or $>$ $550 + 1 \dots 560 - 10$
- 5 What is 10 more than 456?
- 6 Work out $24 \times 3 =$
- 7 Write down the value of the underlined figure $\underline{5}32$
- 8 What fraction of the shape is shaded?
- 9 Complete $5 + 5 + 5 + 5 = 4 \times \dots = \dots$
- 10 Work out $254 + 50 =$



Video tutorials

Simplifying fractions:



Scan the QR code with your phone camera and click on the link which appears to watch the video

Log on to the school VLE using the guide above to watch a video by your teachers on this topic

Scan here

Year 7 Foundation week 1

<https://corbettmaths.com/2013/03/03/simplifying-fractions-2/>



Simplifying Fractions:

To write a fraction in its SIMPLEST form you need to divide the numerator and denominator by their HCF

Always remember the GOLDEN RULE of fractions:

****Whatever you do to the top number (numerator), you do to the bottom number (denominator)!****

To simplify a fraction:

- 1) Find the HCF of the numerator and denominator
- 2) Divide both numerator and denominator by their HCF
- 3) Check you can't simplify it anymore

Examples:

$$\frac{12}{15} \quad \begin{array}{l} 12 \text{ and } 15 \\ \text{HCF} = 3 \end{array} \quad \begin{array}{l} 12 \div 3 \\ \hline 15 \div 3 \end{array} = \frac{4}{5} \quad \begin{array}{l} 4 \text{ and } 5 \\ \text{HCF} = 1 \end{array}$$

$$\frac{32}{88} \quad \begin{array}{l} 32 \text{ and } 88 \\ \text{HCF} = 8 \end{array} \quad \begin{array}{l} 32 \div 8 \\ \hline 88 \div 8 \end{array} = \frac{4}{11}$$

Examples:

1. $\frac{10}{16} = \frac{5}{8}$

$\overset{\div 2}{\curvearrowright}$
 $\underset{\div 2}{\curvearrowleft}$

2. $\frac{20}{50} = \frac{4}{10} = \frac{2}{5}$

$\overset{\div 5}{\curvearrowright}$ $\overset{\div 2}{\curvearrowright}$
 $\underset{\div 5}{\curvearrowleft}$ $\underset{\div 2}{\curvearrowleft}$



Independent Practice on Simplifying Fractions:

Write these fractions in their simplest form.

1) $\frac{5}{15} = \frac{5 \div 5}{15 \div 5} = \underline{\quad}$

2) $\frac{4}{10} = \frac{4 \div 2}{10 \div 2} = \underline{\quad}$

3) $\frac{8}{12} = \frac{8 \div 4}{12 \div 4} = \underline{\quad}$

4) $\frac{12}{20} = \frac{12 \div 4}{20 \div 4} = \underline{\quad}$

5) $\frac{6}{18} = \frac{6 \div 6}{18 \div 6} = \underline{\quad}$

6) $\frac{10}{15} = \frac{10 \div 5}{15 \div 5} = \underline{\quad}$

7) $\frac{8}{14} = \frac{8 \div 2}{14 \div 2} = \underline{\quad}$

8) $\frac{2}{16} = \frac{2 \div 2}{16 \div 2} = \underline{\quad}$

9) $\frac{10}{25} = \frac{10 \div 5}{25 \div 5} = \underline{\quad}$

10) $\frac{6}{22} = \frac{6 \div 2}{22 \div 2} = \underline{\quad}$

Simplify the following fractions in your book using the method shown above.:

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

2. $\frac{35}{40}$

3. $\frac{3}{6}$

4. $\frac{18}{20}$

5. $\frac{4}{36}$

6. $\frac{5}{35}$

7. $\frac{3}{30}$

8. $\frac{44}{48}$

9. $\frac{2}{4}$

10. $\frac{10}{45}$

11. $\frac{6}{14}$

12. $\frac{4}{28}$


13. $\frac{5}{15}$

14. $\frac{4}{32}$

15. $\frac{25}{60}$



Day 2 - Multiplying Fractions

- 1 Work out $9 \times 3 =$
- 2 Work out $356 + 224 =$
- 3 Work out $652 - 462 =$
- 4 Complete using $<$ or $>$ $652 + 10 \dots 659 - 10$
- 5 What is 100 more than 509?
- 6 Work out $43 \times 5 =$
- 7 Write down the value of the underlined figure 847
- 8 What fraction of the shape is shaded? 
- 9 Complete $4 + 4 + 4 + 4 + 4 = 4 \times \dots = \dots$
- 10 Work out $372 - 50 =$

Examples – Video tutorials

Multiplying Fractions



or click on the QR code to follow the hyperlink

Scan the QR code with your phone camera and click on the link which appears to watch the video

Log on to the school VLE using the guide above to watch a video by your teachers on this topic

Year 7 Foundation week 1



Multiplying Fractions:

To multiply fractions you need to:

- 1) Multiply the numerators (top numbers)
- 2) Multiply the denominators (bottom numbers)
- 3) Simplify your answer if possible

For example:

Multiply the
numerators

$$\frac{2}{5} \times \frac{3}{4} = \frac{6}{20}$$

Multiply the
denominators

$$\frac{2}{5} \times \frac{3}{4} = \frac{6}{20}$$

Reduce the fraction if
necessary

$$\frac{6}{20} = \frac{3}{10}$$

Independent Practice on Multiplying Fractions:

(Just multiply the numerators, then multiply the denominators)

a) $\frac{1}{2} \times \frac{1}{2}$ _____

b) $\frac{1}{2} \times \frac{1}{4}$

c) $\frac{1}{2} \times \frac{2}{3}$

d) $\frac{3}{4} \times \frac{1}{3}$

e) $\frac{3}{4} \times \frac{2}{3}$

19. Work out $\frac{2}{5} \times \frac{3}{8}$

Give your answer in its simplest form.



Question 1: Work out each of the following multiplications.
Give each answer in its simplest form.

(a) $\frac{1}{2} \times \frac{1}{5}$

(b) $\frac{1}{2} \times \frac{3}{4}$

(c) $\frac{1}{4} \times \frac{3}{5}$

(d) $\frac{1}{3} \times \frac{1}{3}$

(e) $\frac{5}{6} \times \frac{1}{2}$

(f) $\frac{3}{4} \times \frac{1}{4}$

(g) $\frac{2}{3} \times \frac{1}{7}$

(h) $\frac{5}{8} \times \frac{1}{3}$

(i) $\frac{2}{3} \times \frac{1}{2}$

(j) $\frac{1}{3} \times \frac{3}{4}$

(k) $\frac{3}{10} \times \frac{1}{2}$

(l) $\frac{2}{5} \times \frac{1}{4}$

(m) $\frac{2}{7} \times \frac{3}{4}$

(n) $\frac{5}{7} \times \frac{1}{10}$

(o) $\frac{7}{12} \times \frac{2}{3}$

(p) $\frac{6}{7} \times \frac{2}{3}$

(q) $\frac{6}{7} \times \frac{2}{9}$

(r) $\frac{3}{10} \times \frac{5}{6}$

(s) $\frac{6}{15} \times \frac{3}{4}$

(t) $\frac{3}{5} \times \frac{11}{15}$

(u) $\frac{9}{20} \times \frac{10}{11}$


(v) $\frac{21}{30} \times \frac{2}{3}$

(w) $\frac{12}{25} \times \frac{5}{8}$

(x) $\frac{8}{9} \times \frac{3}{16}$



Day 3 - Dividing Fractions

- 1 Work out $4 \times 8 =$
- 2 Work out $652 + 128 =$
- 3 Work out $542 - 345 =$
- 4 Complete using $<$ or $>$ $356 + 100 \dots 465 - 10$
- 5 What is 10 more than 592?
- 6 Work out $32 \times 4 =$
- 7 Write down the value of the underlined figure $87\underline{4}$
- 8 What fraction of the shape is shaded? 
- 9 Complete $3 + 3 + 3 + 3 + 3 = 5 \times \dots = \dots$
- 10 Work out $756 - 50 =$

Examples – Video tutorials

Dividing Fractions



Scan the QR code with your phone camera and click on the link which appears to watch the video

Log on to the school VLE using the guide above to watch a video by your teacher on this topic

Year 7 Foundation week 1

or click on the QR code to follow the hyperlink

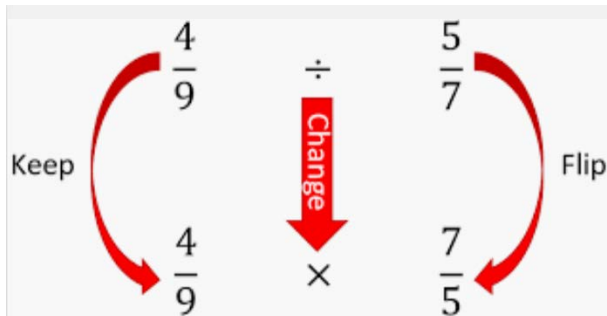


Dividing Fractions:

To divide fractions you need to use **KFC**:

- 1) **Keep** the first fraction (**K**)
- 2) **Flip** the second one (**F**)
- 3) **Change** the division sign to a times sign

4) For example: $\frac{4}{9} \div \frac{5}{7}$



$$= \frac{28}{45}$$

Independent Practice on Dividing Fractions:

(a) $\frac{1}{5} \div \frac{2}{3}$

(b) $\frac{3}{4} \div \frac{4}{5}$

(c) $\frac{1}{2} \div \frac{7}{8}$

(d) $\frac{2}{3} \div \frac{5}{6}$

(e) $\frac{1}{10} \div \frac{4}{9}$

(f) $\frac{6}{11} \div \frac{5}{6}$

(g) $\frac{2}{5} \div \frac{13}{15}$

(h) $\frac{3}{8} \div \frac{7}{9}$

(i) $\frac{3}{5} \div \frac{1}{2}$

(j) $\frac{7}{9} \div \frac{2}{3}$

(k) $\frac{8}{15} \div \frac{7}{10}$

(l) $\frac{9}{10} \div \frac{1}{3}$

(m) $\frac{5}{6} \div \frac{3}{4}$

(n) $\frac{13}{20} \div \frac{8}{11}$

(o) $\frac{4}{17} \div \frac{3}{16}$

(p) $\frac{5}{7} \div \frac{10}{19}$



Day 4 - Converting Mixed Numbers to Improper Fractions

- 1 Work out $4 \times 7 =$
- 2 Work out $605 + 375 =$
- 3 Work out $780 - 345 =$
- 4 Complete using $<$ or $>$ $785 + 1 \dots 799 - 10$
- 5 What is 10 less than 418?
- 6 Work out $55 \times 5 =$
- 7 Write down the value of the underlined figure 483
- 8 What fraction of the shape is unshaded?
- 9 Complete $8 + 8 + 8 = 3 \times \dots = \dots$
- 10 Work out $357 + 500 =$



Video tutorials

Converting mixed to improper



Scan the QR code with your phone camera and click on the link which appears to watch the video

Log on to the school VLE using the guide above to watch a video by your teacher on this topic

Year 7 Foundation week 1

or click on the QR code to follow the hyperlink



Converting Mixed Numbers to Improper Fractions:

A **mixed number** is a number which has a whole number and a fraction together, for example: $3\frac{1}{2}$

An **improper fraction** is a fraction which has a bigger numerator than denominator, for example: $\frac{15}{4}$

In this section we are going to look at converting a **mixed number** into an **improper fraction**

You need to:

- 1) Multiply the whole number by the denominator
- 2) Add the numerator
- 3) Write that number over the original denominator

For example: Convert $3\frac{1}{2}$ into an improper fraction

1) $3 \times 2 = 6$

2) $6+1 = 7$

3) Answer is: $\frac{7}{2}$

For example: Convert $4\frac{3}{5}$ into an improper fraction

1) $4 \times 5 = 20$

2) $20+3 = 23$

3) Answer is: $\frac{23}{5}$



Examples

$$(A) \quad 2\frac{2}{9} = \frac{(2 \times 9) + 2}{9} = \frac{18 + 2}{9} = \frac{20}{9}$$

$$(B) \quad 4\frac{1}{5} = \frac{(4 \times 5) + 1}{5} = \frac{20 + 1}{5} = \frac{21}{5}$$

Independent Practice on Converting Mixed to Improper:

Change these mixed numbers into improper fractions

(a) $2\frac{1}{5}$

(b) $3\frac{1}{2}$

(c) $1\frac{3}{4}$

(d) $3\frac{2}{3}$

(e) $1\frac{2}{5}$

(f) $2\frac{4}{7}$

(g) $1\frac{1}{3}$

(h) $2\frac{3}{10}$

(i) $4\frac{3}{4}$

(j) $1\frac{7}{12}$

(k) $3\frac{9}{10}$

(l) $2\frac{3}{50}$

(m) $3\frac{5}{8}$

(n) $8\frac{3}{8}$

(o) $1\frac{14}{32}$

(p) $2\frac{19}{24}$

(q) $12\frac{1}{9}$

(r) $5\frac{4}{15}$

(s) $4\frac{11}{12}$

(t) $13\frac{7}{16}$



Day 5 - Converting Improper Fractions to Mixed Numbers

- 1 Work out $3 \times 12 =$
- 2 Work out $564 + 244 =$
- 3 Work out $805 - 619 =$
- 4 Complete using $<$ or $>$ $501 - 10 \dots 485 + 10$
- 5 What is 100 less than 456?
- 6 Work out $28 \times 4 =$
- 7 Write down the value of the underlined figure $80\underline{9}$
- 8 What fraction of the shape is unshaded?
- 9 Complete $4 + 4 + 4 + 4 + 4 + 4 = \dots \times 4 = \dots$
- 10 Work out $301 - 20 =$



Video tutorials

Improper to mixed numbers



Scan the QR code with your phone camera and click on the link which appears to watch the video

Log on to the school VLE using the guide above to watch a video by your teacher on this topic

Year 7 Foundation week 1

or click on the QR code to follow the hyperlink



Converting Improper Fractions to Mixed Numbers:

In this section we are going to look at converting a **improper fraction** into a **mixed number**

You need to:

- 1) Divide numerator by denominator
- 2) Write the whole number as number of times the denominator goes into the numerator
- 3) Write the remainder as the numerator of the fraction

For example: Convert $\frac{15}{4}$ into a mixed number

- 1) $15 \div 4 = 3$, remainder 3
- 2) 3 is the whole number
- 3) The fraction is $\frac{3}{4}$
- 4) The answer is $3\frac{3}{4}$

For example: Convert $\frac{19}{6}$ into a mixed number

- 1) $19 \div 6 = 3$, remainder 1
- 2) 3 is the whole number
- 3) The fraction is $\frac{1}{6}$
- 4) The answer is $3\frac{1}{6}$



Independent Practice on Converting Improper to Mixed numbers:

Question 1: Change these improper fractions into mixed numbers

(a) $\frac{7}{3}$

(b) $\frac{7}{5}$

(c) $\frac{5}{2}$

(d) $\frac{8}{7}$

(e) $\frac{5}{3}$

(f) $\frac{10}{3}$

(g) $\frac{23}{2}$

(h) $\frac{11}{4}$

(i) $\frac{11}{8}$

(j) $\frac{9}{4}$

(k) $\frac{13}{10}$

(l) $\frac{13}{6}$

(m) $\frac{16}{7}$

(n) $\frac{51}{10}$

(o) $\frac{34}{11}$

(p) $\frac{29}{12}$

(q) $\frac{60}{11}$

(r) $\frac{47}{15}$

(s) $\frac{101}{9}$

(t) $\frac{99}{20}$

(u) $\frac{12}{9}$

(v) $\frac{35}{10}$

(w) $\frac{18}{4}$

(x) $\frac{50}{6}$

(y) $\frac{40}{15}$

OPTIONAL extension, try if you can:

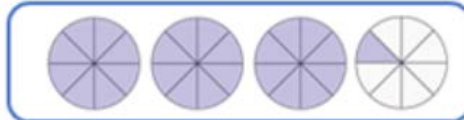
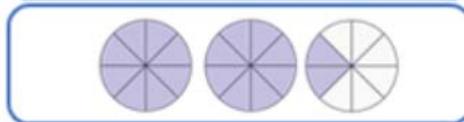
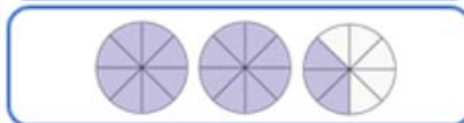
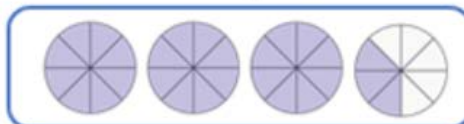
Match the improper fraction to its visual representation and then its mixed number.

$\frac{27}{8}$

$\frac{18}{8}$

$\frac{25}{8}$

$\frac{19}{8}$



$2\frac{3}{8}$

$3\frac{1}{8}$

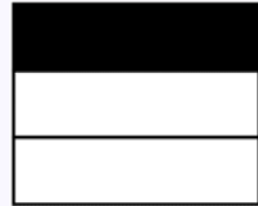
$3\frac{3}{8}$

$2\frac{2}{8}$



Day 6 - Adding Fractions with the Same Denominator

- 1 Work out $4 \times 4 =$
- 2 Work out $151 + 251 =$
- 3 Work out $607 - 359 =$
- 4 Complete using $<$ or $>$ $994 - 100 \dots 784 + 10$
- 5 What is 100 less than 754?
- 6 Work out $34 \times 5 =$
- 7 Write down the value of the underlined figure $9\underline{8}2$
- 8 What fraction of the shape is shaded?
- 9 Complete $2 + 2 + 2 + 2 = 4 \times \dots = \dots$
- 10 Work out $395 + 20 =$



Video tutorials



Scan the QR code with your phone camera and click on the link which appears to watch the video

Log on to the school VLE using the guide above to watch a video by your teacher on this topic

Year 7 Foundation week 2



Adding fractions

If the denominators (bottom numbers) are the same you just:


- 1) Add the numerators (top numbers)
- 2) Keep the denominators (bottom numbers) the same
- 3) Simplify if possible


For example: $\frac{2}{6} + \frac{2}{6} = \frac{4}{6}$ >> you can simplify to $\frac{2}{3}$

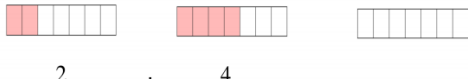
For example: $\frac{1}{5} + \frac{2}{5} = \frac{3}{5}$ >> you can't simplify so leave it


Independent Practice on Adding Fractions with the Same Denominators:

Question 1: Work out the following additions.
You may use the shapes to help.

(a) 
 $\frac{1}{3} + \frac{1}{3} =$

(b) 
 $\frac{2}{5} + \frac{1}{5} =$

(c) 
 $\frac{2}{7} + \frac{4}{7} =$

(d) 
 $\frac{2}{15} + \frac{11}{15} =$

Question 2: Work out the following additions

(a) $\frac{1}{5} + \frac{1}{5}$ (b) $\frac{3}{11} + \frac{2}{11}$ (c) $\frac{1}{9} + \frac{7}{9}$ (d) $\frac{3}{7} + \frac{3}{7}$

(e) $\frac{6}{11} + \frac{2}{11}$ (f) $\frac{7}{13} + \frac{4}{13}$ (g) $\frac{3}{5} + \frac{1}{5}$ (h) $\frac{10}{21} + \frac{10}{21}$



Work out these additions and simplify into mixed numbers where possible:

(a) $\frac{2}{3} + \frac{2}{3}$

(b) $\frac{4}{5} + \frac{3}{5}$

(c) $\frac{7}{10} + \frac{4}{10}$

(d) $\frac{3}{8} + \frac{5}{8}$

(e) $\frac{9}{11} + \frac{10}{11}$

(f) $\frac{9}{20} + \frac{13}{20}$

(g) $\frac{8}{13} + \frac{6}{13}$

(h) $\frac{41}{50} + \frac{19}{50}$



Day 7 - Subtracting Fractions with the Same Denominator

- 1 Work out $7 \times 3 =$
- 2 Work out $602 + 378 =$
- 3 Work out $900 - 798 =$
- 4 Complete using $<$ or $>$ $345 - 10 \dots 326 + 10$
- 5 What is 100 more than 85?
- 6 Work out $46 \times 3 =$
- 7 Write down the value of the underlined figure 876
- 8 What fraction of the shape is shaded?
- 9 Complete $\dots + \dots + \dots + \dots = 4 \times 8 =$
- 10 Work out $628 - 30 =$



Video tutorial



Scan the QR code with your phone camera and click on the link which appears to watch the video

Log on to the school VLE using the guide above to watch a video by your teacher on this topics

Year 7 Foundation week 2



Subtracting fractions

If the denominators (bottom numbers) are the same you just:

- 1) Subtract the numerators (top numbers)
- 2) Keep the denominators (bottom numbers) the same
- 3) Simplify if possible or convert into a mixed number if improper

For example: $\frac{7}{8} - \frac{1}{8} = \frac{6}{8}$ >> you can simplify to $\frac{3}{4}$

For example: $\frac{4}{5} - \frac{2}{5} = \frac{2}{5}$ >> you can't simplify so leave it

Independent Practice on Subtracting Fractions with the Same Denominators:

Question 3: Work out the following subtractions

| | | | |
|-----------------------------------|------------------------------------|---------------------------------|------------------------------------|
| (a) $\frac{3}{5} - \frac{1}{5}$ | (b) $\frac{6}{7} - \frac{2}{7}$ | (c) $\frac{4}{5} - \frac{3}{5}$ | (d) $\frac{7}{13} - \frac{1}{13}$ |
| (e) $\frac{9}{11} - \frac{6}{11}$ | (f) $\frac{16}{21} - \frac{8}{21}$ | (g) $\frac{5}{6} - \frac{5}{6}$ | (h) $\frac{16}{25} - \frac{9}{25}$ |



1. $\frac{10}{12} - \frac{3}{12} =$ _____

2. $\frac{3}{4} - \frac{2}{4} =$ _____

3. $\frac{4}{6} - \frac{3}{6} =$ _____

4. $\frac{6}{10} - \frac{5}{10} =$ _____

5. $\frac{7}{11} - \frac{2}{11} =$ _____

6. $\frac{10}{12} - \frac{4}{12} =$ _____

7. $\frac{8}{9} - \frac{7}{9} =$ _____

8. $\frac{4}{5} - \frac{3}{5} =$ _____

9. $\frac{7}{8} - \frac{6}{8} =$ _____

10. $\frac{2}{3} - \frac{1}{3} =$ _____

11. $\frac{5}{7} - \frac{3}{7} =$ _____

12. $\frac{4}{6} - \frac{1}{6} =$ _____

13. $\frac{7}{9} - \frac{5}{9} =$ _____

14. $\frac{8}{12} - \frac{6}{12} =$ _____

15. $\frac{6}{11} - \frac{4}{11} =$ _____

OPTIONAL extension, try if you can: MIXED QUESTIONS

Question 4: Work out the following additions and subtractions
Simplify your answers if possible

(a) $\frac{1}{4} + \frac{1}{4}$

(b) $\frac{5}{6} - \frac{1}{6}$

(c) $\frac{3}{8} + \frac{3}{8}$

(d) $\frac{7}{10} - \frac{3}{10}$

(e) $\frac{2}{9} + \frac{4}{9}$

(f) $\frac{3}{20} + \frac{7}{20}$

(g) $\frac{1}{12} + \frac{5}{12}$

(h) $\frac{17}{30} - \frac{7}{30}$

(i) $\frac{19}{20} - \frac{7}{20}$

(j) $\frac{11}{18} + \frac{5}{18}$

(k) $\frac{9}{16} - \frac{7}{16}$

(l) $\frac{19}{80} + \frac{31}{80}$



Day 8 - Fraction Review and Worded Questions

- 1 Write down the value of the underlined figure $\underline{6}342$
- 2 What is 100 more than 3420?
- 3 Work out 4×6
- 4 Work out $415 + 224$
- 5 Work out $567 - 255$
- 6 Round 636 to the nearest 10
- 7 Write 0.5 as a fraction
- 8 Work out $650 \div 10$
- 9 Write in words 364
- 10 Work out $64 \div 8$

Video tutorials

Log on to the school VLE using the guide above to watch a video by your teacher on this topic

Year 7 Foundation week 2

Or look at the videos linked in the previous days



Fraction Review

Use the notes and examples from the previous section to answer these questions.

In a worded question, try to work out which operation (+, -, x, ÷) the question is asking you to use.

Independent Practice on Fractions:

1) $\frac{2}{3} \times \frac{1}{4}$

2) $\frac{3}{5} \times \frac{2}{3}$

3) $\frac{3}{5} \times \frac{5}{6}$

4) $\frac{2}{3} \times \frac{3}{5}$

5) $\frac{8}{9} \times \frac{3}{4}$

6) $\frac{2}{9} \times \frac{3}{8}$

1) $\frac{2}{3} \div \frac{1}{4}$

2) $\frac{3}{5} \div \frac{3}{4}$

3) $\frac{4}{5} \div \frac{4}{6}$

4) $\frac{1}{3} \div \frac{5}{6}$

5) $\frac{9}{10} \div \frac{3}{5}$

6) $\frac{4}{5} \div \frac{3}{10}$



$$1) \quad \frac{1}{3} + \frac{1}{3}$$

$$2) \quad \frac{2}{5} + \frac{1}{5}$$

$$3) \quad \frac{1}{7} + \frac{3}{7}$$

$$4) \quad \frac{1}{8} + \frac{5}{8}$$

$$5) \quad \frac{2}{7} + \frac{5}{7}$$

$$6) \quad \frac{1}{9} + \frac{7}{9}$$

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

$$2) \quad \frac{4}{5} - \frac{2}{5}$$

$$3) \quad \frac{4}{7} - \frac{3}{7}$$

$$4) \quad \frac{7}{8} - \frac{5}{8}$$

$$5) \quad \frac{3}{7} - \frac{2}{7}$$

$$6) \quad \frac{7}{9} - \frac{3}{9}$$



Independent Practice on Worded Fraction Questions:

Question 1: On Monday, James ate $\frac{1}{8}$ of a cake.

On Tuesday, he ate $\frac{3}{8}$ of the same cake.

In total, how much of the cake has James eaten?

Question 2: At a rugby match, $\frac{3}{5}$ of the crowd are male.

What fraction of the crowd are female?



Question 3: In one season, a netball team won $\frac{4}{7}$ of their matches.

They drew $\frac{2}{7}$ of their matches.

What fraction of the matches did they lose?

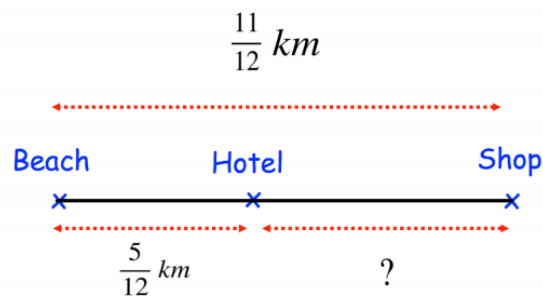
Question 4: In a school, pupils study French, German or Spanish.

$\frac{1}{9}$ of the pupils study Spanish.

Half of the remaining pupils study French.

What fraction of the pupils study French?

Question 5: Find the distance from the hotel to the shop.



Question 6: A wooden rod is $\frac{4}{5} m$ long.

Find the total length of 4 wooden rods.

Question 7: Three fractions have been added together and the answer is $\frac{17}{20}$

Write down three fractions that may have been added together.



Day 9 - Sequences: Find the rule

- 1 Write down the value of the underlined figure 3542
- 2 What is 100 less than 5564?
- 3 Work out 7×8
- 4 Work out $617 + 229$
- 5 Work out $727 - 518$
- 6 Round 854 to the nearest 10
- 7 Write 0.25 as a fraction
- 8 Work out $4500 \div 10$
- 9 Write in words 703
- 10 Work out $45 \div 9$

Video tutorials

Finding the rules



Scan the QR code with your phone camera and click on the link which appears to watch the video

Log on to the school VLE using the guide above to watch a video by your teacher on this topic

Year 7 Foundation week 2



Sequences:

A sequence is a list of numbers or objects that follows a given rule.

Some examples of sequences are:

- **3, 7, 11, 15, 19...** (add 4)
- **6, 2, -2, -6, -10...** (subtract 4)
- **2, 4, 8, 16, 32...** (multiply 2)

**Each of these follow a rule:
adding/subtracting/multiplying/dividing the same number
each time.**

You need to find out the rule. To do this:

- 1) Look at the first two numbers and work out the difference between them**
- 2) Check this is the difference every time**

Example:

Find the rule of this sequence: 3, 5, 7, 9, 11...

- 1) How do you get from 3 to 5: you add 2**
- 2) Do you add 2 every time? Yes**

Rule is: add 2

Example:

Find the rule of this sequence: 14, 10, 6, 2...

- 1) How do you get from 14 to 10: you subtract 4**
- 2) Do you subtract 4 every time? Yes**

Rule is: subtract 4



Example:

Find the rule of this sequence: 2, 6, 18, 54...

- 1) How do you get from 2 to 6: you add 4**
- 2) Do you add 4 every time? No**
- 3) How else do you get from 2 to 6: you multiply 3**
- 4) Do you multiply 3 every time? Yes**

Rule is: multiply 3

Independent Practice on Finding the Rule of the Sequence:

Question 1: Describe the rule for each sequence below

(a) 3, 5, 7, 9, ...

(b) 5, 10, 15, 20, ...

(c) 1, 4, 7, 10, ...

(d) 20, 19, 18, 17, ...

(e) 5, 10, 20, 40, ...

(f) 10, 14, 18, 22, ...

(g) 1, 6, 11, 16, ...

(h) 2, 4, 8, 16, ...

(i) 100, 80, 60, 40, ...

(j) 5, 12, 19, 26, ...

(k) 1, 10, 100, 1000, ...

(l) 64, 32, 16, 8, ...

(m) 55, 66, 77, 88, ...

(n) 32, 41, 50, 59, ...

(o) 15, 9, 3, -3, ...

(p) 2, 2.5, 3, 3.5, ...

(q) 8, 22, 36, 50, ...

(r) 1, 3, 9, 27, ...



Day 10 - Sequences: Next term

- 1 Write down the value of the underlined figure 4535
- 2 What is 100 less than 5056?
- 3 Work out 9×8
- 4 Work out $557 + 165$
- 5 Work out $902 - 548$
- 6 Round 725 to the nearest 10
- 7 Write $\frac{3}{4}$ as a decimal
- 8 Work out $4050 \div 10$
- 9 Write in words 815
- 10 Work out $60 \div 12$

Video tutorials



Scan the QR code with your phone camera and click on the link which appears to watch the video

Log on to the school VLE using the guide above to watch a video by your teacher on — this topic

Year 7 Foundation week 2



Sequences:

A sequence is a list of numbers or objects that follows a given rule.

Some examples of sequences are:

- **3, 7, 11, 15, 19... (add 4)**
- **6, 2, -2, -6, -10... (subtract 4)**
- **2, 4, 8, 16, 32... (multiply 2)**

**Each of these follow a rule:
adding/subtracting/multiplying/dividing the same number
each time.**

To find the next term you need to:

- 1) Find the rule of the sequence (see Day 9)**
 - 2) Use that to find the next terms**
-



Independent Practice on Finding the Next Term in a Sequence:

1. Here are the first four terms of a number sequence.

8 14 20 26

- (a) Write down the next term of the number sequence.

.....
(1)

- (b) Explain how you found your answer.

.....
(1)

-
2. Here are the first four terms of a number sequence.

2 5 8 11

- (a) (i) Write down the next term of the number sequence.

.....
(1)



3. Here are the first four terms of a number sequence.

11 15 19 23

(a) (i) Write down the next term of the number sequence.

.....
(1)

(ii) Explain how you found your answer.

.....
(1)

7. (a) Write down the next term in this sequence.

256 128 64 32

.....
(1)

(b) Describe the rule for continuing the sequence.

.....
.....
(1)



9. Write down the next two numbers in this sequence.

2 5 11 23

..... and
(1)

10. Here are the first five terms of a number sequence.

9 15 21 27 33

(a) (i) Write down the next term of the number sequence.

.....
(1)

12. Here are the first 4 terms in a number sequence.

132 124 116 108

(a) Write down the next two terms in this number sequence.

..... and
(1)