## Lesson 2- Fractions

## What do you need?

Pen and Paper

## How to use the Annotation function

You can use the Annotation function when your teacher would like you to draw on the screen.

1) At the top of the page click on View Options.
2) Chose Annotate.

3) Try Annotating the screen now.
4) Tick or write your name in the Zone that you are in.

| Blue Zone <br> Going slow | Green Zone | Red Zone |  |
| :--- | :--- | :--- | :--- |
| E.g. sad, sick, tired, <br> bored | E.g. happy, calm, <br> focused, ok | E.g. worried, excited, <br> annoyed | E.g. angry, terrified, <br> elated |
|  |  |  |  |

Fractions can be added and subtracted. It is much easier to do when the denominators are both the same number.

## Adding Fractions

As a fraction, how many of the boxes are coloured?


First of all we need to know the denominator.
Secondly, we need to find the fractions of the coloured boxes.
Lastly, we add these two fractions together.

## Adding Fractions

As a fraction, how many of the boxes are blue?

$\frac{1}{5}$ of the boxes are blue.

## Adding Fractions

As a fraction, how many of the boxes are orange?

$\frac{1}{5}$ of the boxes are blue. $\frac{2}{5}$ of the boxes are orange. We now have our 2 fractions!

## Adding Fractions

To find the amount of coloured boxes, we add both of these fractions together.

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

The denominators are both the same number so we leave them as they are, they don't get added together (this is very important).

We simply add the two numerators together!

## Adding Fractions

Jessie and James share a chocolate bar.


Jessie eats $\frac{2}{7}$ of it. James eats $\frac{4}{7}$ of it.


As a fraction, how much of the chocolate bar did Jessie and James eat all together?

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

## Adding Fractions

To find the amount of chocolate eaten altogether, we add...

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

Think: What happens when the denominators are the same?

## Adding Fractions



$$
\frac{1}{4}+\frac{3}{4}=\frac{4}{4}=1
$$

## Adding Fractions


$\frac{1}{3}+\frac{1}{3}=\frac{2}{3}$
red
green

## Adding Fractions


$\frac{3}{5}+\frac{1}{5}=\frac{4}{5}$
red
green

## Adding Fractions



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

## Adding Fractions


$\frac{2}{6}+\frac{3}{6}=\frac{5}{6}$

## Adding Fractions

$$
\underbrace{\frac{0}{4}} \frac{\frac{1}{4} \quad \frac{2}{4}}{4}+\frac{3}{4} \frac{4}{4}=\frac{2}{4}
$$

## Adding Fractions

$$
\frac{\frac{0}{4} \quad \frac{1}{4} \quad \frac{2}{4} \quad \frac{3}{4} \quad \frac{4}{4}}{\frac{2}{4}+\frac{1}{4}=\frac{3}{4}}
$$

## Adding Fractions

$$
\underbrace{\frac{0}{5} \quad \frac{2}{5} \quad \frac{3}{5} \quad \frac{4}{5}}_{\frac{2}{5}+\frac{2}{5}=\frac{4}{5}}
$$

## Adding Fractions

$$
\frac{\frac{0}{6} \quad \frac{1}{6} \quad \frac{2}{6} \quad \frac{3}{6} \quad \frac{4}{6} \quad \frac{5}{6} \quad \frac{6}{6}}{\frac{4}{6}+\frac{1}{6}=\frac{5}{6}}
$$

## Adding Fractions

$$
\underbrace{\frac{0}{8} \quad \frac{1}{8}}_{\frac{3}{8}+\frac{3}{8}=\frac{6}{8}} \frac{\frac{2}{8}}{1}
$$

## Adding Fractions

$$
\underbrace{\underbrace{\frac{0}{8}}_{1} \quad \frac{\frac{1}{8}}{1} \quad \frac{2}{8} \quad \frac{3}{8} \quad \frac{4}{8} \quad \frac{5}{8} \quad \frac{6}{8} \quad \frac{7}{8}}_{\frac{2}{8}+\frac{5}{8}=\frac{7}{8}}
$$

## Adding Fractions

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

## Adding Fractions

$\frac{2}{4}+\frac{1}{4}=\frac{3}{4}$

## Adding Fractions

$$
\frac{3}{5}+\frac{1}{5}=\frac{4}{5}
$$

## Adding Fractions

$$
\frac{1}{6}+\frac{2}{6}=\frac{3}{6}
$$

## Adding Fractions

$$
\frac{4}{8}+\frac{1}{8}=\frac{5}{8}
$$

## Adding Fractions

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

## Adding Fractions

$$
\frac{3}{8}+\frac{4}{8}=\frac{7}{8}
$$

## Subtracting Fractions

- Subtracting fractions with the same denominator is really simple!
- Write down your calculation.
- Your answer will have the same denominator.
- Find the difference between the numerators - you have you answer!
- If you can, simplify the new fraction to its lowest form.



## Subtracting Fractions


$\frac{3}{4}-\frac{1}{4}=\frac{2}{4}$ or $\frac{1}{2}$

## Subtracting Fractions



$$
\frac{3}{4}-\frac{1}{4}=\frac{2}{4} \text { or } \frac{1}{2}
$$

## Subtracting Fractions



## Subtracting Fractions



## Subtracting Fractions



## Subtracting Fractions



## Subtracting Fractions



## Subtracting Fractions



## Subtracting Fractions


$\frac{11}{12}-\frac{7}{12}=\frac{4}{12}$ or $\frac{1}{3}$

## Subtracting Fractions






## Traffic light your work today.

Thumbs down- I don't understand it
Thumbs across- I understand some of it
Thumbs up- I understand all of it

