



‘Confident, Independent, Forward-thinking’

# Kents Hill Park Online Lesson

## Recording of Online Lessons

**Please be aware that all Online Lessons are recorded**

**Following all lessons the recording will be made available within Microsoft Teams to all staff and pupils for review and recap.**



**Kents Hill Park School**

## Participating in an online lesson using an online learning platform

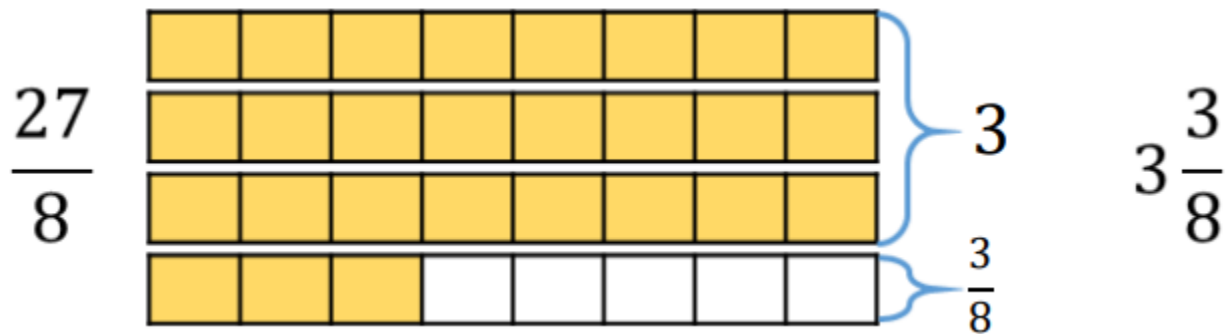
I understand that an online lesson is an extension of the classroom and that I should conduct myself as I would in a classroom environment.

This includes:

- Taking part in an online lesson in an environment that is safe, quiet and free from distractions (preferably not a bedroom)
- Being on time for the virtual lesson.
- Remaining attentive during lesson.
- Interacting patiently and respectfully with your teachers and peers.
- Not recording each other's online interactions.
- Remaining for the full duration of the lesson.
- Switching off my video camera and microphone before joining a lesson and when requested to do so by your teacher.
- Finishing the session when your teacher instructs you to do so.



Tommy converts the improper fraction  $\frac{27}{8}$  into a mixed number using bar models.



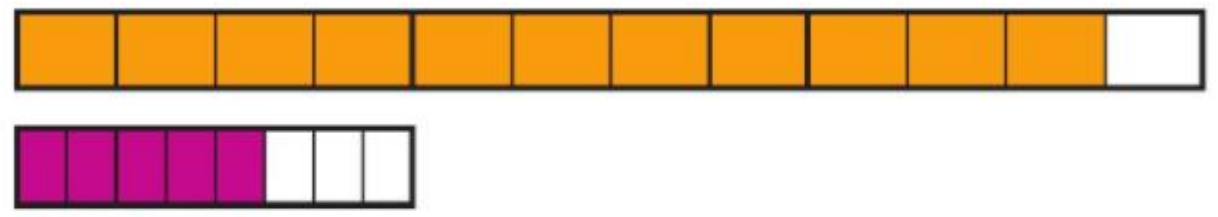
Write the following improper fractions as mixed numbers.

$$\frac{22}{3} = \underline{\hspace{2cm}} \quad \text{b) } \frac{14}{5} = \underline{\hspace{2cm}} \quad \text{c) } \frac{23}{10} = \underline{\hspace{2cm}} \quad \text{d) } \frac{34}{10} = \underline{\hspace{2cm}} \quad \text{e) } \frac{21}{5} = \underline{\hspace{2cm}}$$

$$\frac{5}{2} = \underline{\hspace{2cm}} \quad \text{g) } \frac{16}{3} = \underline{\hspace{2cm}} \quad \text{h) } \frac{19}{4} = \underline{\hspace{2cm}} \quad \text{i) } \frac{31}{4} = \underline{\hspace{2cm}} \quad \text{j) } \frac{30}{6} = \underline{\hspace{2cm}}$$

2 Add together  $2\frac{3}{4}$  and  $\frac{5}{8}$ .

Method 1: Converting to improper fractions first



$$2\frac{3}{4} + \frac{5}{8} = \boxed{3} \frac{\boxed{3}}{\boxed{8}}$$

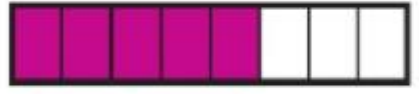
$$2\frac{3}{4} = \frac{11}{4} \xrightarrow{\times 2} \frac{22}{8}$$

$$\frac{11}{4} + \frac{5}{8}$$

$$\frac{22}{8} + \frac{5}{8} = \frac{27}{8}$$

2

Add together  $2\frac{3}{4}$  and  $\frac{5}{8}$ .



$$2\frac{3}{4} + \frac{5}{8} = \square \frac{\square}{\square}$$

Method 2: Adding the whole numbers first, then the fractions

2

$$\begin{aligned} & \frac{3}{4} = \frac{6}{8} \leftarrow \frac{3}{4} + \frac{5}{8} \\ & \frac{6}{8} + \frac{5}{8} = \frac{11}{8} \\ & = 2 + 1\frac{3}{8} = 3\frac{3}{8} \end{aligned}$$

$\frac{11}{8} = 2\frac{3}{8}$  ?

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

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

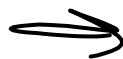
1 Work out  $2\frac{1}{3} + 1\frac{2}{9}$ .



Change each number to an improper fraction first:

$$2\frac{1}{3} = \frac{7}{3}$$

$$1\frac{2}{9} = \frac{11}{9}$$



Find a common denominator:  $\frac{7}{3} = \frac{21}{9}$

$$\text{Add the fractions: } \frac{21}{9} + \frac{11}{9} = \frac{32}{9}$$

$$= 3\frac{5}{9}$$

So,  $2\frac{1}{3} + 1\frac{2}{9} = 3\frac{5}{9}$

2 Convert  $2\frac{3}{8}$  to an improper fraction to work out  $\frac{1}{2} + 2\frac{3}{8}$ .



$$\frac{1}{2} + 2\frac{3}{8} = 2\frac{7}{8}$$

$$\frac{1}{2} + \frac{19}{8} = \frac{4}{8} + \frac{19}{8} = \frac{23}{8} = 2\frac{7}{8}$$

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

$$2 = \frac{16}{8}$$

$$2\frac{3}{8} = \frac{19}{8}$$



3 Work out the following.

a)  $2\frac{1}{4} + \frac{5}{8}$

c)  $4\frac{2}{5} + 1\frac{3}{20}$

b)  $4\frac{7}{10} + 1\frac{1}{2}$

d)  $\frac{7}{16} + 4\frac{3}{4}$

4 Washing powder is sold in two sizes.

What is the total weight of the two boxes?


The total weight of the two boxes is   kg.

Three children have incorrectly converted  $3\frac{2}{5}$  into an improper fraction.



Annie

$$3\frac{2}{5} = \frac{6}{15}$$



Mo

$$3\frac{2}{5} = \frac{15}{5}$$



Dexter

$$3\frac{2}{5} = \frac{32}{5}$$

What mistake has each child made?

5 Kate is adding  $13\frac{2}{5}$  and  $4\frac{7}{50}$ .

She says, 'I think I will add the wholes and the parts instead of converting to improper fractions.'

Do you agree with Kate? Explain your answer.

---

---

---

Fill in the missing numbers.

How many different possibilities can you find for each equation?

$$2\frac{\square}{8} = \frac{\square}{8}$$

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

Compare the number of possibilities you found.

6 Find the missing fractions in the working out.



$$\begin{aligned} & \boxed{\phantom{00}} \frac{\boxed{\phantom{00}}}{6} + \boxed{\phantom{00}} \frac{\boxed{\phantom{00}}}{12} \\ &= \frac{\boxed{\phantom{00}}}{\boxed{\phantom{00}}} + \frac{\boxed{\phantom{00}}}{12} \\ &= \frac{22}{12} + \frac{19}{12} = \frac{\boxed{\phantom{00}}}{12} = 3 \frac{\boxed{\phantom{00}}}{12} \end{aligned}$$

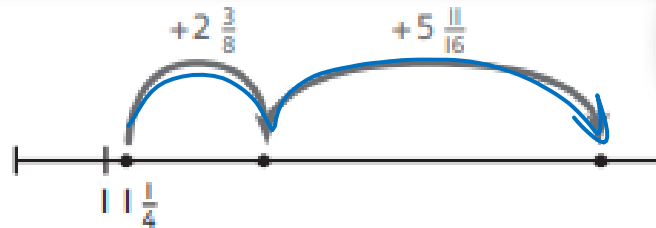
*mixed numbers*

*improper fractions*

$$9 \frac{5}{16} + \frac{11}{16} \rightarrow \frac{16}{16}$$

$$= 2 \frac{11}{16}$$

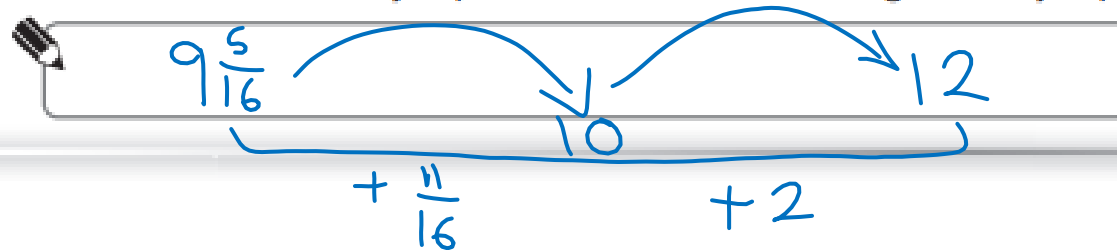
7 Max is making jumps on a number line.



**CHALLENGE**

a) What number has Max finished on?

b) Max makes one more jump and lands on 12. How long was his jump?



$$1 \frac{1}{4} + 2 \frac{3}{8} + 5 \frac{11}{16}$$

$$8 + 1 \frac{5}{16} = 9 \frac{5}{16}$$

$$\frac{1}{4} + \frac{3}{8} + \frac{11}{16}$$

$$\frac{4}{16} + \frac{6}{16} + \frac{11}{16}$$

$$= \frac{21}{16} = 1 \frac{5}{16}$$

Amir says,

$\frac{28}{3}$  is less than  $\frac{37}{5}$   
because 28 is less than  
37



Do you agree?  
Explain why.

## Spot the mistake

- $\frac{27}{5} = 5\frac{1}{5}$
- $\frac{27}{3} = 8$
- $\frac{27}{4} = 5\frac{7}{4}$
- $\frac{27}{10} = 20\frac{7}{10}$

What mistakes have been made?

Can you find the correct answers?

Rosie says,



To find equivalent fractions, whatever you do to the numerator, you do to the denominator.

Using her method, here are the equivalent fractions Rosie has found for  $\frac{4}{8}$

$$\frac{4}{8} = \frac{8}{16} \quad \frac{4}{8} = \frac{6}{10}$$

$$\frac{4}{8} = \frac{2}{4} \quad \frac{4}{8} = \frac{1}{5}$$

Are all Rosie's fractions equivalent?

Does Rosie's method work?

Explain your reasons.